

**MORSE WATCHMANS  
KEYWATCHER  
ILLUMINATED  
MANUAL**

6365-00A







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# PREFACE

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## INTRODUCTION

The Security Industry is experiencing a rapid and sweeping transition to electronic and computerized equipment. Today's security directors expect sophistication in every aspect of their security program. Morse Watchman's is a leader in this movement. We know our customers and their needs.

The KeyWatcher system offers you more than just a key storage cabinet. Each key is fitted with a stainless steel key ring which will work in conjunction with the KeyWatcher to allow access only to users with proper access codes. The KeyWatcher will record an access history of each key and user, allowing keys to be traced in seconds, eliminating guesswork and the paper chase created by outdated manual logs.

Controlling keys is a big part of controlling security. The KeyWatcher will offer immediate access and total accountability.

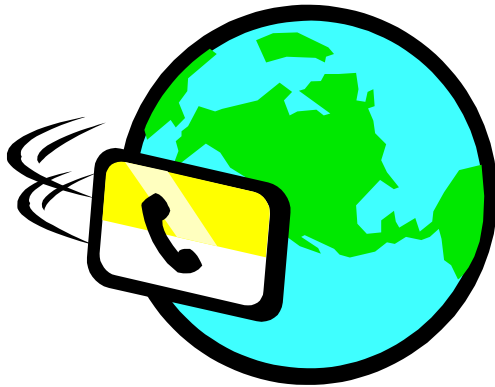
Morse Watchmans Inc., an innovator in the field of guard tour and key management equipment, has been in business for over 100 years. Located in Oxford Connecticut, Morse Watchman serves customers around the world with the latest, state of the art automatic guard tour systems and key management systems.



### TECHNICAL SUPPORT

Technical support is always available to Morse Watchman's customers. If assistance is needed, feel free to call us during our business hours and a technical support representative will be happy to assist you.

Please be prepared to provide us with a full description of the problem you are experiencing. Call from a location where the KeyWatcher is accessible, because the Morse Technician may wish to troubleshoot the system over the phone.



U.S.A.	
<b>Phone:</b>	<b>(203) 264-4949</b> <b>Service - option 2</b> <b>KeyWatcher - option 2</b>
<b>Fax:</b>	<b>(203) 264-8367</b>
<b>Hours:</b>	<b>8:00 A.M. - 5:30 P.M. (EST)</b>

UK CUSTOMERS	
<b>Phone:</b>	<b>(0115) 967-1567</b>
<b>Fax:</b>	<b>(0115) 967-1306</b>
<b>Hours:</b>	<b>9:00 A.M. - 5:30 P.M.</b>

**DO NOT SEND ANY KEYWATCHER EQUIPMENT  
BACK TO MORSE WATCHMANS WITHOUT A  
RETURN AUTHORIZATION NUMBER (RMA).**

The KeyWatcher is fully serviceable by the customer. A Morse Technician will determine what parts, if any, are not functioning properly. These parts will be shipped to you as advance replacements, along with a Return Material Authorization number. **The defective parts should be returned to Morse Watchmans as soon as possible (WITHIN 30 DAYS). Be sure to include the RMA number on the package.**

## HOW TO USE THIS MANUAL

This manual contains instructions for installing the KeyWatcher key management system. It provides detailed instructions on how to program, operate, and maintain the system. It is both a learning tool for the beginner and a reference for the advanced user.

If you are a new user, it is recommended that you read this manual in its entirety before attempting to operate the KeyWatcher. It is also recommended that you refer to the system diagrams in the service & maintenance section. These diagrams describe the main components in the system.

Section II explains how to program the KeyWatcher after installation. Spend time adding users and keys, removing and returning keys, and generating reports. If you experience any problems or questions, write them down. Feel free to call the Morse Watchman Technical Support Department.

## MANUAL ORGANIZATION

- Section I - Getting Started:** Takes you through the installation and setup of the KeyWatcher.
- Section II - Programming & Customizing:** Explains how to customize the KeyWatcher to suit your needs.
- Section III - Removal & Return of Keys:** Explains how to access the KeyWatcher to remove keys and return them to the unit.
- Section IV - Alarms:** Explains the alarms that can be tripped through the KeyWatcher and how the alarms can be viewed and canceled. Also described in this section are the optional alarm outputs.
- Section V - Generate Reports:** Details the different types of reports available, and how to generate them.
- Section VI - Utility Menu:** Explains specialized functions of the KeyWatcher.
- Section VII - Software:** Briefly describes the software included with the KeyWatcher. The software will be described in the Key-Pro III User Manual.
- Section VIII - Reference:** Includes some helpful information about the KeyWatcher.
- Sections IX - Charts:** These charts will help in assigning user codes, key names, time zones, and restrictions.
- Section X - Example Reports:** These are examples of reports that can be generated to a printer connected directly to the KeyWatcher.
- Section XI - Service & Maintenance:** This section describes how to service & maintain the KeyWatcher. Also provided in this section are system diagrams.



**SECTION**

**I**

**GETTING STARTED**

# GETTING STARTED

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## UNPACKING YOUR SYSTEM

When unpacking your system, always compare the packing list to the enclosed equipment. If you feel that there is a discrepancy, call Morse Watchman within 48 hours after receipt of the package. Claims after 30 days will not be honored.

After mounting the KeyWatcher (see pages 3 - 5), power the system according to the instructions on page 6 and allow the KeyWatcher's backup battery to charge for approximately 8 hours before programming the KeyWatcher. This will prevent the possibility of loss of programming if there is a power failure during the first few hours of operation.



# INSTALLATION

---

## SELECTING A LOCATION

The most important consideration in choosing a location for your KeyWatcher is that it is conveniently placed and accessible by all users. Try to keep the following in mind when mounting:

- ◆ Mount the KeyWatcher so that the top row of keys are accessible to all users. The mounting holes for each box are located inside at the top and bottom of the KeyWatcher and are designed for walls with studs 16 inches (40.64 cm) on center. The KeyWatcher will need to be mounted firmly to the wall.
- ◆ Systems containing multiple cabinets, mounted in a row are typically manufactured to have the first cabinet on the right side and subsequent cabinets mounted to the left of that.
- ◆ Mount the KeyWatcher close enough to connect a printer, modem, or computer to avoid excessive cable lengths. If you plan on running a serial cable to a computer, the maximum length is 200 feet (60 m) depending on the cable that you are using.
- ◆ Be sure to use a power outlet that matches the power cord provided with your system. If the power cord has 3 prongs, the outlet must also have 3 holes to match. Do not cut or bypass the grounding pin using any adapters.
- ◆ Keep in mind that if your power connector and communication ports are located at the bottom of the KeyWatcher, leave adequate room to make these connections.

If you will be supplying power through the knockout on the rear of the box, be sure there is adequate room for the power cord to fit when the panel is reassembled. Systems with internal power connections that contain multiple Power Supplies will require a qualified electrician to install a sufficient extension cord from box 1 to all boxes that contain a Power Supply. A template showing the knockout is provided with the KeyWatcher.

- ◆ It is recommended that the KeyWatcher be connected to a separate Earth Ground for safety and electrostatic discharge protection. This grounding is provided for through the AC line cord in USA installations, however, in situations where high electrostatic discharge is anticipated or experienced, it is recommended that this separate ground be installed. This ground is mandatory in all foreign KeyWatcher installations where grounding is not typically provided for in the cord sets or outlets. The grounding lug is located at the bottom, inside the KeyWatcher.
- ◆ **KeyWatcher cabinets are shipped with two screws to hold the front panel in place. The screws will need to be removed before you begin your installation. If you desire, the two screws may be put back after the system has been completely mounted, however this is not necessary.**

## **MOUNTING THE KEYWATCHER**

Once a location has been selected, the KeyWatcher can be mounted using the supplied template. Since the mounting holes are located inside the box, the front panel will need to be removed. Follow the instructions in the Service & Maintenance section to remove the front panel. After the front panel has been removed, proceed to the first step. Repeat the mounting procedure for each box making sure it is mounted as ordered. After the KeyWatcher has been mounted using the supplied template, continue with the installation on the following pages.

### **Sheet Rock/Wood Walls**

- 1) Make sure that the studs in your wall are 16 inches (40.64 cm) apart on center. This is the standard in the USA. If your studs are not 16 inches (40.64 cm) on center and the wall is sheet rock, you should screw a 1/2 inch (1.27 cm) piece of plywood to the wall with the same dimensions as your KeyWatcher.
- 2) Find the center of a stud on the wall you would like to mount the KeyWatcher on and use the supplied template to mark the wall with a pencil for each mounting hole.
- 3) With a power drill, screw a 1 1/2 inch (3.81 cm) No. 10 wood screw three quarters of the way into the wall to accommodate the top two mounting holes.

**NOTE: If power is to be supplied internally, use the supplied template and trace the knockout. Install your receptacle in the marked area.**

- 4) Place the KeyWatcher on the wall and tighten the top two screws all the way down.
- 5) With the power drill, screw a 1 1/2 inch (3.81 cm) No. 10 wood screw all the way down to accommodate the bottom two mounting holes.

### **Cement Walls**

- 1) Using the supplied template, mark the wall at each of the holes.
- 2) With a 1/4 inch (6.5 mm) cement drill bit, drill a 1 1/2 (3.81 cm) to 2 inch (5.08 cm) hole in each of the areas marked.
- 3) Insert screw anchors into each hole. Tap the anchors in until they are flush with the wall.
- 4) Insert a 1 1/2 inch (3.81 cm) screw into the top two wall anchors. Tighten the screws three quarters of the way down.
- 5) Place the KeyWatcher on the wall and tighten the top two screws all the way down.
- 6) Insert a 1 1/2 inch (3.81 cm) screw into the bottom two wall anchors and tighten them all the way down.

Please keep in mind that these mounting instructions are to be used as a guide only and may need to be modified depending on your installation requirements. Morse Watchmans will not be held liable for any problem caused due to an improper installation.

### **Mounting - Control Box**

The Control box is to be mounted to the bottom of cabinet 1. The following steps explain how the Control Box is mounted:

- 1) Connect the display and keypad cables located in cabinet 1 to the to the appropriate connectors located in the Control Box. If the system was supplied with a reader, connect the wires from the reader to the CPU board.
- 2) Insert the mounting tabs of the Control Box through the holes located on the bottom of cabinet 1 and slide the Control Box to right. This will allow the tabs to shift into place and the mounting holes on the Control Box should line up with the mounting holes on the cabinet. Secure the Control Box to the cabinet using the supplied screws.



## WIRING PROCEDURE

The following explains how to install the communication wires in a KeyWatcher Illuminated system. Some wires may already be connected from the manufacturer.

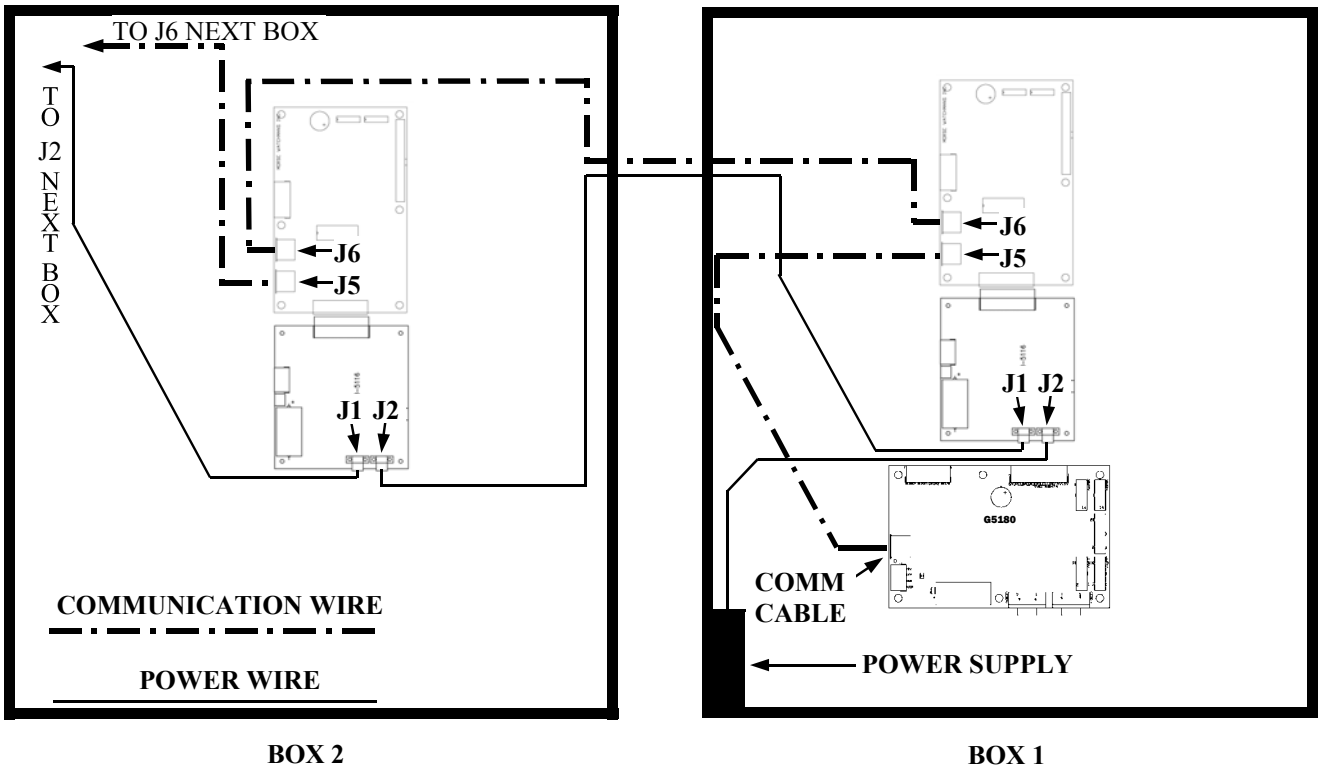
Communication Connections			
From:		To:	
Box 1	COMM Cable KeyWatcher III Master Board (G5180)	Box 1	J5 KeyWatcher III SMD Board (G5119)
Box 1	J6 KeyWatcher III SMD Board (G5119)	Box 2	J6 KeyWatcher III SMD Board (G5119)
Additional boxes: <b>From</b> J5 KeyWatcher III SMD Board (G5119) <b>To</b> J6 KeyWatcher III SMD Board (G5119)			

The following steps explain how to install the power wires in a KeyWatcher Illuminated system. Some wires may already be connected from the manufacturer. Please note that the power cord from the Power Supply(s) to the wall outlet(s) should not be connected until the Power Up Procedure.

Power Connections			
From:		To:	
Box 1	Power Supply	Box 1	J2 Power Management Board (G5116)
Box 1	J1 Power Management Board (G5116)	Box 2	J2 Power Management Board (G5116)
Additional boxes (No Power Supply): <b>From</b> J1 Power Management Board (G5116) <b>To</b> J2 Power Management Board (G5116)			
Additional boxes (With Power Supply): <b>From</b> Power Supply <b>To</b> J2 Power Management Board (G5116)			

Systems with internal power connections that contain multiple Power Supplies will require a qualified electrician to install a sufficient extension cord from box 1 to all boxes that contain a Power Supply.

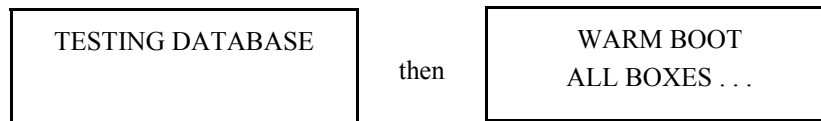
Be sure RAM Battery Jumper on the KeyWatcher III Master Board (G5180) is connected across both pins.



## **POWER UP PROCEDURE**

The following explains how to power up a KeyWatcher system.

- 1) Install the communication and power wires according to the instructions provided.
- 2) Connect the power cords from the wall outlets to all the Power Supplies other than box 1. At this point you will notice the red LED's illuminate and the green LED's will begin flashing on boxes 2 - 17.
- 3) With the exception of box 1, connect the battery leads at the bottom of each box making sure that the black lead is connected to negative and the red lead is connected to positive.
- 4) Connect the power cord from the wall outlet to the Power Supply in box 1. At this point the red LED on box 1 will illuminate and the green LED will begin flashing. The following will be displayed:



- 5) The system will then search to see what boxes are connected in the system. As each box is found, the green LED will stop flashing indicating that it has been recognized. Once the next number box is not found, the system will stop the search and the last box found will be assigned to the system. If there are more boxes that the system should have found and the green LED's on those boxes are still flashing after the power up, you will need to verify all connections and perform the ERASE DATABASE function in order for those boxes to be recognized.
- 6) When all of the boxes in the system have been found, connect the battery leads at the bottom of box 1 making sure that the black lead is connected to negative and the red lead is connected to positive.
- 7) At this point, the display on KeyWatcher will be flashing between the time & date and the title screen. You may now continue with the next page and program the system to your specifications.

**DISREGARD BOX NUMBERS THAT DO  
NOT PERTAIN TO YOUR SYSTEM.**

## ACCESSING THE KEYWATCHER

The KeyWatcher comes equipped with a default user ID - PIN number of **0000-0000**. This code should be used to gain access while programming the KeyWatcher. To gain access to the KeyWatcher, follow these steps:

- 1) Press any key on the KeyWatcher's keypad. The following will be displayed:

ENTER ID - PIN ----- - -----
---------------------------------

- 2) Enter the default user ID - PIN number (**0000-0000**) and press the **ENT** key. If a mistake is made while entering the user code, the **CLR** key may be used to backspace. If an incorrect ID or PIN number is entered, a message will be displayed. Re-enter the user code and press **ENT**. Once a valid user code is entered, the following will be displayed provided the KeyWatcher is not alarming. (See alarm section for more information.)

REMOVE ↓ KEYS
------------------

- 3) The display now shows that if **ENT** is pressed, it will be in the Remove Keys mode. The arrow on the left side of the display indicates that pressing the down arrow will allow you to move through the menu. Press the down arrow key until the display shows:

↑ MAIN
↓ MENU

- 4) At this prompt, the **ENT** key may be pressed to display a list of Main Menu functions, or the up and down arrows may be used to move up and down through the options list. If **ENT** is pressed, a Main Menu item will be displayed. Use the arrow keys to toggle through the Main Menu selections. Press the **ENT** key to choose a selection. The **CLR** key may be used at any time to back-up through the menus. For example, pressing **CLR** at the Main Menu screen will exit the main menu and return to the title screen.

Once access has been gained to the Main Menu, proceed to the next section for information on programming the KeyWatcher.

<p style="text-align: center;"><b>DEFAULT USER ID - PIN NUMBER</b></p> <p style="text-align: center;"><b>0000-0000</b></p>
--



SECTION

II

PROGRAMMING  
& CUSTOMIZING

## **PROGRAMMING**

### **(EXAMPLE)**

It is fairly simple to program, operate, and extract reports from the KeyWatcher. Here is a sample of how someone should go about programming the system.

- 1) **Add Keys.** The smartkeys **must** be added into the system directly on the KeyWatcher. The system does not come with the smartkeys programmed and will need to add them to the system. This allows the KeyWatcher to learn and number each key for tracking purposes. This can be done in two ways.

- A) Adding keys upon powering the KeyWatcher with the keys already in the locations.

Upon power up, the system will automatically begin assigning numbers. Numbers are assigned in each module starting in the upper left module of box 1 in row 1 and continue with row 2, row 3, etc... in that module. The system will then move to the next module and continue assigning key numbers. The KeyWatcher will learn the identity of each smart key, assign a number to each of them, and give the key a default name. The KeyWatcher always assigns the next available key number to the key being added, regardless which location the key is in.

**Example:** The KeyWatcher is powered up with keys in locations 1, 2, 3, 4, 6, 7, 8, 9, and 10.  
(Notice that location 5 has no key in it.)

The KeyWatcher will assign these keys the numbers 1, 2, 3, 4, 5, 6, 7, 8, and 9 respectively. The next key added to the system will be assigned the number 10, regardless which location the key is inserted.

**Note:** If you are encountering INVALID keys and you are just getting started, the ERASE DATABASE function will allow the system to be reset and assign the keys that are in the system as described above. See page 123.

- B) Adding keys after the system is powered up.

This is best explained on page 37. Keep in mind that you cannot add keys using the software. Keys **MUST** be added using the KeyWatcher.

If you will be using the Key-Pro III software to program the system, install that software now. Once the software is installed, you may follow the instructions in your Key-Pro III manual for programming the rest of the information. Keep in mind that you will still need to refer to this manual for descriptions of the KeyWatcher functions.

If you will be using the KeyWatcher to program the system, you need to follow the instructions in this manual. Whichever way you decide to program the system, it is easiest done in the following order.

**Note:** The following is much easier using the Key-Pro III Software.

### **(Key-Pro III software Users) Select “Get Database” in Database Window**

- 2) **Name Keys.** When keys are added to the system, they are given a default name. This name can be changed. To change a key name, see page 53.
- 3) **Add Time Zones.** Time zones are used to restrict a users access to keys for a certain period of time. There are two types of time zones. A good example of how these time zones are used is shown on page 41.
  - A) Specific Time Zone. See page 49.
  - B) Duration Time Zone. See page 51.
- 4) **Add Groups.** A group consists of multiple keys. See page 39.
- 5) **Add Users.** A user is anyone who has access to the system. A user may range from only being able to remove and return keys to someone who also has access to generating reports, canceling alarms, or even changing the programming. To add a new user, see page 42.
- 6) **Add User Restrictions.** A user restriction is actually what is used to give a user access to certain keys. There are two ways that user restrictions can be added.
  - A) On Keys. This is best explained on page 45.
  - B) On Groups. This is best explained on page 47.

### **(Key-Pro III software Users) Select Send Database in Database Window**

### SETUP (EXAMPLE)

Once the programming is complete, the KeyWatcher can be used to track the movement of your keys, however, the KeyWatcher offers many other features. Some of the features we find important are briefly explained here. Keep in mind that the KeyWatcher does offer other features not described on this page. You will still want to read through this manual to familiarize yourself with all of the available features that the system offers.

- 1) **Set Date / Time.** The KeyWatcher's date & time should always be set properly. This will insure that the reports you generate are accurate. To set the date in the KeyWatcher, see page 15.
- 2) **Company Name.** The company name is also important, especially for those users with multiple KeyWatcher systems. The company name not only appears on the display of the KeyWatcher, it also appears on reports that are generated allowing the user to determine easily what system the report was generated from. See page 16 for information about changing the company name.
- 3) **Door Sensor.** The door sensor feature, when enabled, allows the system to trigger an alarm if the door is forced open or left open after a user removes or returns keys. To set the door sensor, see page 21.
- 4) **Access Enable.** The access enable feature, when turned on, allows the system to halt repeated attempts to access the KeyWatcher with improper user codes. To set the access enable feature, see page 22.
- 5) **Key Return Method.** The KeyWatcher allows keys to be returned in two ways. To set the key return method, see page 24. (This item not available on Non-Random systems.)
  - A) **Automatic Box Return.**  
Allows the KeyWatcher to choose the box to which keys are to be returned.
  - B) **Manual Box Return.**  
Allows the user to choose the box to which keys are to be returned.
- 6) **Set Group Release Type.** The KeyWatcher allows groups to be removed in two ways. To set the group release type, see page 25.
  - A) **All Group Keys.**  
If the group release type is set for all group keys, each key in the group will be released, one at a time, when a group is removed.
  - B) **Next Available Key.**  
If the group release type is set for the next available key, only the next available key in the group will be released, when a group is removed.
- 7) **Alarm Sound.** The alarm sound feature allows the programmer to set whether or not the alarm sound will be on at all times, off at all times, or on for a period of five minutes. To set the alarm sound, see page 27.
- 8) **Archive Warning Enable.** The archive warning allows the programmer to set whether or not an alarm will be triggered if transactions have not been gathered from the KeyWatcher by the Key-Pro software. To set the archive warning feature, see page 28.
- 9) **Print Transactions.** This report allows the KeyWatcher to print each transaction directly to a serial printer, connected to the KeyWatcher, as they occur. See page 114 to set print transactions.

## **HOW TO PROGRAM THE KEYWATCHER**

The KeyWatcher is a very sophisticated (but easy to use) key management system. It allows the tracking of keys in moments, by selecting user audits or key audits. It also allows users to be restricted in the use of keys, by assigning users access to only certain keys, or by placing time and day restrictions on the keys. Before any of these features may be implemented, the KeyWatcher must be programmed. The following pages explain how to program the KeyWatcher to suit your particular needs. Read this section thoroughly to receive the most from your KeyWatcher. The KeyWatcher can be used in conjunction with the Key-Pro III Software or as a completely stand alone system. The information contained in this manual describes everything as a stand alone system. For more information about the Key-Pro III Software, refer to the Key-Pro III Manual.

To program the KeyWatcher, access the Main Menu as described on page 7. The following Main Menu items are available:

- Setup**
- Database**
- Generate Reports**
- Alarms**
- Utilities**

The menu options displayed above will allow the user to customize the KeyWatcher, print reports, cancel alarms and perform specialized functions. The following is a brief summary of each main menu item.

**1) Setup:**

Contains options that should be set to your preference when the KeyWatcher is first programmed.

**2) Database:**

All of the important information stored in the KeyWatcher is contained here. Programming of keys and users is performed in this area as well.

**3) Generate Reports:**

Allows reports to be generated on keys or users directly to a printer connected to the KeyWatcher.

**4) Alarms:**

Allows the user to cancel or print the alarm or alarms that have been tripped.

**5) Utilities:**

Special supervisor functions are contained in this section.



## **MENU NAVIGATION / KEYPAD USAGE**

The KeyWatcher's menu system has been made very simple to navigate. Whenever the system is sitting idle, the display constantly flashes between the time/date screen and the title screen. When a key on the keypad is pressed, the display will illuminate and ask you to enter your user ID and PIN number.

Once a valid user ID and PIN number are entered, the display will show Remove Keys, and an arrow will appear on the left side of the display. This shows you which direction you may travel through the menu. For example, if you press the down arrow key, the display will show Remove Group, and 2 arrows will be shown, one pointing up and one pointing down. This indicates that you may now move either up or down through the menu.

To choose a function while navigating through the menus, press the **ENT** key when the desired function is displayed. For example, when Main Menu is displayed, pressing **ENT** places you in the Main Menu.

Remember, use the arrow keys to move up and down through the menus, and use the **ENT** key to make a selection.

The **CLR** key may be used at any time to back up through the menu.

When changing settings for certain functions such as Date/Time or Alarm Sound, the KeyWatcher will display the current setting for that function.

When adding or changing a name, the alpha numeric keypad is used. This is accomplished by pressing the number on the keypad that contains the letter you want to be inserted for the name until that letter appears. For example, when adding a user, you will be asked to enter the users name. If the users name is Bob, you would press the number 2 key until the letter B appears and press **ENT**. Next you may press number 6 key until the letter O appears and press **ENT**. To enter the third letter in the name, you would press the number 2 key until the letter B appears and press **ENT**.

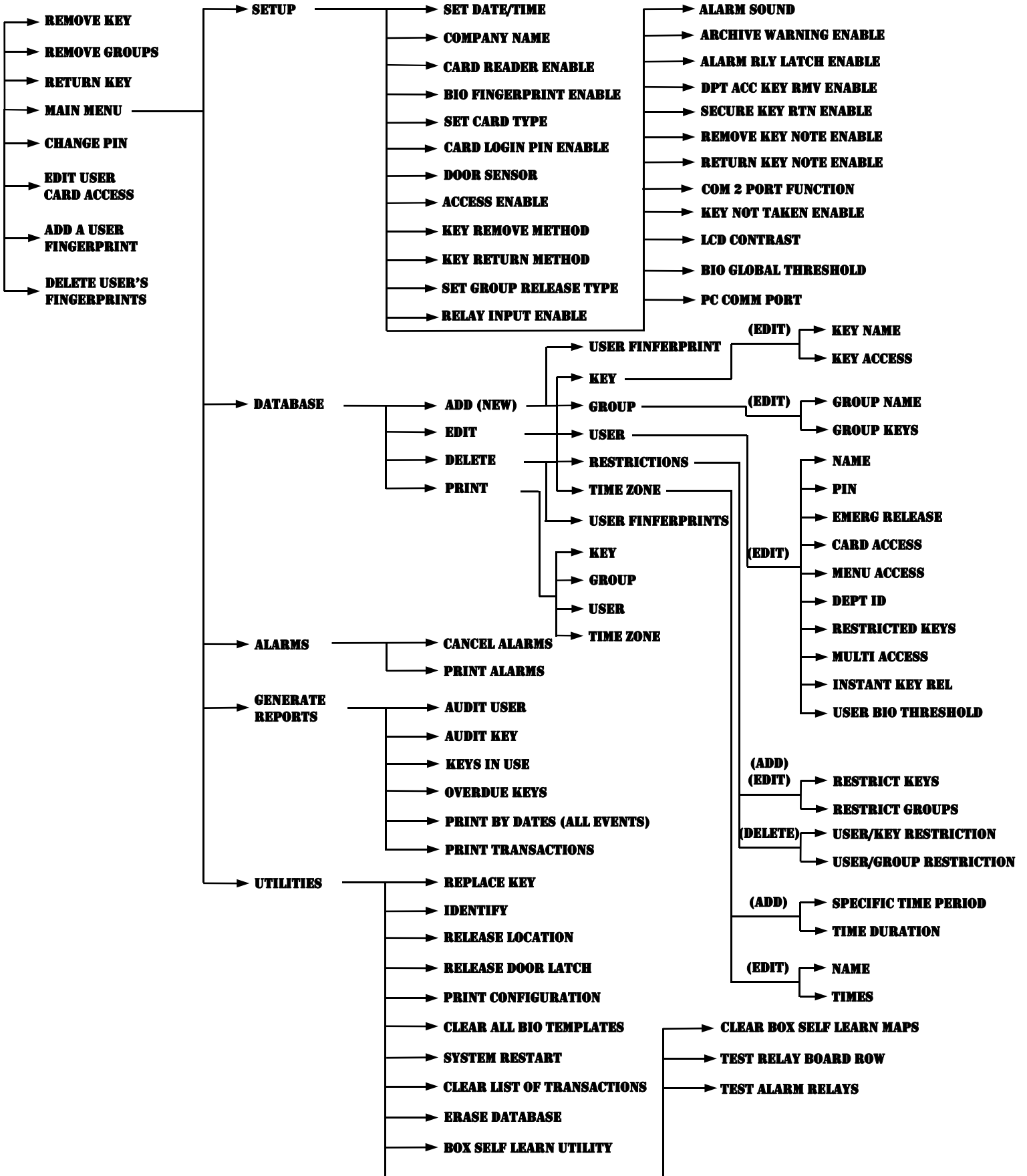
In order to remove a letter that the cursor is under, press **CLR**. In order to go back if a mistake has been made, press **CLR** twice. In order to use a space between letters the, 0 key may be pressed twice. No other special characters are available.

**Note:** If the next letter in the name uses a different key press, **ENT** does not need to be pressed in order to go to the next letter.

The following page is a flow chart that shows the menu structure. Please note that some items may not appear depending on certain settings.



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# SETUP MENU

The setup menu contains many options that may be set, such as the date, time, door sensor, etc.. This section will explain each item and how it is used.

## SET DATE/TIME

To set the current date/time on the KeyWatcher, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press **ENT**. Depending on the current setting, one of the following will be displayed:

US  
↓      DATE FORMAT

↑      EUROPEAN1  
↓      DATE FORMAT

↑      EUROPEAN2  
DATE FORMAT

- 3) Use the up and down arrows until the date format you will be using is displayed and press **ENT**. One of the following will be displayed:

US  
MM / DD / YYYY  
04 / 07 / 2004

EUROPEAN1  
DD / MM / YYYY  
07 / 04 / 2004

EUROPEAN2  
YYYY / MM / DD  
2004 / 04 / 07

- 4) Set the date according to your specific format selected and press **ENT**. The following will be displayed (WED shown as example).

DATE PROGRAMMED  
TODAY IS WED

then

ENTER TIME  
[HH:MM]:      07 : 01

- 5) Enter the time in **24 hour format** using the keypad. If a mistake is made, press the **CLR** key to backspace. Press **ENT** when you are done. The following will be displayed:

DISPLAY 12/24 HR  
CHOOSE            12/24

- 6) This item allows the user to determine whether the KeyWatcher will display the Date/Time in 12 hour format or 24 hour format. Please keep in mind that this item only pertains to Date/Time on the display of the KeyWatcher and will have no effect on reports. Place the cursor under the format you want to be displayed and press **ENT**. The display will then return to step 2.

## COMPANY NAME

The Company Name function allows the user to add a Company and Building Name to the title screen on the display of the KeyWatcher. The Company Name will appear on the top line of the display while the Building Name appears on the bottom of the display. To program the Company and Building Name, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

↓  
SET DATE/TIME

- 2) Press the down arrow key until the following is displayed:

↑ COMPANY NAME  
↓

- 3) Press **ENT**. The following will be displayed:

→ COMPANY NAME  
BUILDING NAME

- 4) To select the Company or Building Name, use the up and down arrow keys to position the selection arrow so it points to the selection you want and press **ENT** to select it. The following will be displayed:

COMPANY NAME:  
MRSE WATCHMANS

- 5) Enter the Company or Building Name using the alpha numeric keypad, then press **ENT**. The following will be displayed and the display will then automatically return to step 2. When you are finished programming and return to the title screen, you will see your Company and Building Name, the Date/Time, and Morse Watchmans logo flashing back and forth on the KeyWatcher's display.

COMPANY NAME  
CHANGED

or

BUILDING NAME  
CHANGED

**NOTE: THE COMPANY NAME WILL AUTOMATICALLY BE CENTERED ON THE DISPLAY.**

## CARD READER ENABLE

The KeyWatcher allows a Card Reader (sold separately) to be connected. Systems with the Card Reader connected will allow the user to access the KeyWatcher with the reader or an ID and PIN number on the keypad. If your system will have a reader connected, you will need to enable this feature at the KeyWatcher in order for it to operate properly. To enable or disable your Card Reader, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:

↑    CARD READER  
↓    ENABLE

- 3) Press **ENT**. The following will be displayed:

CARD READER  
ENABLE?    Y/N

- 4) Use the arrow keys to select whether or not you would like the card reader enabled or disabled and press **ENT**. If 'Y' is selected proceed to step 5. If 'N' is selected the following will be displayed and the display will then automatically return to step 2.

CARD READER  
DISABLED

- 5) If 'Y' was selected at step 4, the following will be displayed and the display will return to step 2.

CARD READER  
ENABLED

- 6) If the following is displayed, please feel free to contact our Service Department for assistance.

CARD READER  
NOT ENABLED

**Note:** When adding a user to the system you will be prompted to "SWIPE CARD NOW" for that user. This prompt is a generic term which also could mean scan hand, place finger, etc. The user may then gain access to the KeyWatcher using the Reader or the keypad.

**Note:** If the reader is not operating after enabled, be sure the Card Type is set properly. For more information regarding Card Type, see page 20.

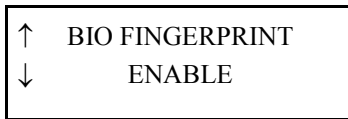
## BIO FINGERPRINT ENABLE

This feature operates in conjunction with the Bioscrypt reader (sold separately). This is a separate fingerprint reader that is connected to the KeyWatcher and will be maintained by the KeyWatcher programming. This item can only be supplied by Morse Watchman. The default setting is disabled. Once enabled the KeyWatcher will prompt for a 4 digit ID and for the user to place finger on reader To enable the BIO Fingerprint Reader, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:



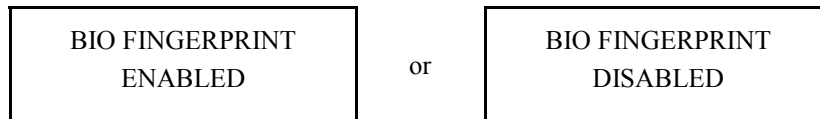
- 2) Press the down arrow key until the following is displayed:



- 3) Press **ENT**. The following will be displayed:

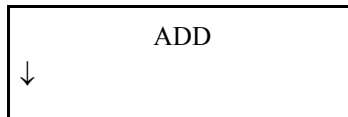


- 4) Use the arrow keys to select whether or not you would like BIO Fingerprint enabled or disabled and press **ENT**. Depending on your selection, one of the following will be displayed and the display will then automatically return to step 2.

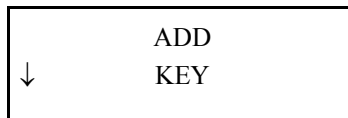


To Add User Fingerprints, follow these steps: (When the Bioscrypt Fingerprint Reader is enabled, this menu item will also appear on the initial menu under Change Pin.)

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:



- 2) Press **ENT**. The following will be displayed:



- 3) Press the down arrow key until the following is displayed:



- 4) Press **ENT**. A series of checks will be performed with the Bioscrypt reader and the top of the next page will be displayed:

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ENTER USER NUM  
[xxxx]: \_

- 5) Enter the ID number of the user to which a Fingerprint is to be added and press **ENT**. The following will be displayed:

PLACE FINGER  
ON SENSOR

- 6) At this point the user should place their finger on the Bioscrypt reader. See chart below for special notes regarding the Bioscrypt reader.

To Delete User Fingerprints, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

ADD  
↓

- 2) Press the down arrow key until the following is displayed:

↑ DELETE  
↓

- 3) Press the down arrow key until the following is displayed:

↑ DELETE USER'S  
FINGERPRINTS

- 4) Press **ENT**. The following will be displayed:

ENTER USER NUM  
[xxxx]: \_

- 5) Enter the ID number of the user to which Fingerprint templates are to be deleted and press **ENT**. If templates exist for that user, they will all be deleted.

### IMPORTANT INFORMATION WHEN USING THE BIOSCRYPT READER

Each user may have up to 3 templates assigned to their ID.

The Bioscrypt reader will allow up to 4000 total templates to be added.

If a level 1 user accesses the KeyWatcher and does not initiate a fingerprint read or gets a verify failed message, the system will prompt for the users 4 digit PIN number.

The Key-Pro III software automatically backs up the templates for each user.

## SET CARD TYPE

The KeyWatcher allows a Card Reader (sold separately) to be connected. Depending on the reader type being used, the Card Type may need to be changed. There are 8 card type selections, Weigand, TRK 1 Magstripe, TRK 2 Magstripe, custom, TRK 2 (KW2), Weigand K2 STD, Weigand K2 DATA, and TRK1 (KW2). Custom setting is defined at the factory per customers specification prior to shipping. The default Card Type is Weigand. To set the card type, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:



- 2) Press the down arrow key until the following is displayed:



- 3) Press **ENT**. The following will be displayed:



- 4) If you would like the card type to be Weigand, press **ENT**. If you would like the card type set to TRK 1 Magstripe, TRK 2 Magstripe, custom, TRK 2 (KW2), Weigand K2 STD, Weigand K2 DATA, or TRK1 (KW2), press the down arrow key until the correct setting is displayed and then press **ENT**. After your selection, a message will be displayed indicating the card type setting and the display will return to step 3.  
**Note:** Be sure to enable the card reader. For more information regarding Card Reader Enable, see page 24.

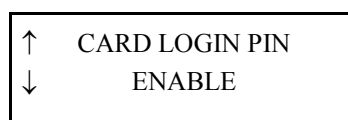
## CARD LOGIN PIN ENABLE

This function operates in conjunction with the Card Reader. When the Card Login PIN is enabled and a user accesses the KeyWatcher with a Card Reader, they will also be required to enter their assigned PIN number for additional security. This function may also be used in conjunction with the **User Keypad Login**, which forces the user to initiate a Card Read. To enable the card login pin, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:



- 2) Press the down arrow key until the following is displayed:



- 3) Press **ENT** and Use the arrow keys to select whether or not you would like Card Login Pin enabled or disabled and press **ENT**.



## DOOR SENSOR

The KeyWatcher is equipped with a door sensor that will sound an alarm if the door is forced open at an improper time (Illegal Entry) or if the door is left open after a key is removed or returned. The sensor may be turned on or off for each box in the system. If the sensor is off, there will be no indication when the door is left open or forced open. The KeyWatcher is shipped with the door sensor turned off. The sensor should be turned on when the KeyWatcher is ready for use. To turn the door sensor on/off, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow until the following is displayed:

↑ DOOR SENSOR  
↓

- 3) Press **ENT**. The following will be displayed: (If your system has only one box, the following will be skipped)

WHICH BOX  
[1-18]: \_

- 4) Enter the number of the box that you want to turn the door sensor on/off and press **ENT**. The following will be displayed:

**Y** = Enabled (Door Sensor On)

**N** = Disabled (Door Sensor Off)

DOOR SENSOR  
ENABLE?    Y/N

- 5) Use the arrow keys to select whether the door sensor will be enabled or disabled and press **ENT**. Depending on what you choose one of the following will be shown and the display will then automatically return to step 2.

DOOR SENSOR  
ENABLED

or

DOOR SENSOR  
DISABLED

## **ACCESS ENABLE**

The KeyWatcher is equipped with a feature that prevents unauthorized personnel from making constant attempts to access the KeyWatcher. When the Access Enable feature is turned on, the KeyWatcher will allow 3 attempts at entering an appropriate user code. If an improper access code is entered 3 times consecutively, the KeyWatcher will sound an alarm and disable the keypad for 4 minutes. The KeyWatcher is shipped with the Access Alarm turned off. To turn on the Access Enable Alarm, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:

↑ ACCESS ENABLE  
↓

- 3) Press **ENT**. The following will be displayed:

**Y** = Enabled (Access Enable on)

**N** = Disabled (Access Enable off)

ACCESS ENABLE  
ENABLE?    Y/N

- 4) Use the arrow keys to select whether the Access Enable will be enabled or disabled and press **ENT**. Depending on what you choose, one of the following will be shown and the display will then automatically return to step 2.

ACCESS ENABLE  
ENABLED

or

ACCESS ENABLE  
DISABLED

## KEY REMOVE METHOD

The KeyWatcher provides two methods of removing keys from the system. Keys can be removed by key number or by key name. The KeyWatcher default for key removal is by number. To set which key remove method you would like, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

↓  
SET DATE/TIME

- 2) Press the down arrow key until the following is displayed:

↑ KEY  
↓ REMOVE METHOD

- 3) Press **ENT**. The following will be displayed:

→ BY KEY NUMBER  
BY KEY NAME

- 4) To select the Key Remove Method, use the up and down arrow keys to position the selection arrow so it points to the selection you want and press **ENT** to select it. One of the following will be displayed and the display will return to step 3.

RETURN METHD  
CHANGED

or

RETURN METHD  
NOT CHANGED

## KEY RETURN METHOD

The KeyWatcher provides two methods of returning keys to the system. A manual return of keys, which will allow the user to choose which box the key(s) will be returned to, and an automatic return of keys, which will allow the KeyWatcher to select which box the key(s) will be returned to. The manual return method will open the box that you tell the KeyWatcher you want to return keys to, as long as there is an open slot. The automatic return method will ask the user how many keys are being returned and open the door to the box that has the most available locations. In certain situations the system may require the user to open more than one door in order to return all keys being returned. The KeyWatcher defaults to the Automatic key return method. To set which key return method you would like, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

↓  
SET DATE/TIME

- 2) Press the down arrow key until the following is displayed:

↑            KEY  
↓            RETURN METHOD

- 3) Press **ENT**. The following will be displayed:

↓  
AUTO BOX  
SELECTION

- 4) If you would like the KeyWatcher to select the box that the keys will be returned to, press **ENT**. The following will be displayed and the display will then automatically return to step 3. If you would like the user to select the box that the keys will be returned to, proceed to step 5.

[ AUTO BOX SELECT ENABLED ]    then    [ RETURN METHD CHANGED ]    or    [ RETURN METHD NOT CHANGED ]

- 5) If you would like the user to select the box that the keys will be returned to, press the down arrow key until the following is displayed:

↑            MANUAL BOX  
SELECTION

- 6) Press **ENT**. The following will be displayed and the display will then automatically return to step 5.

[ MANUAL BOX SELECT ENABLED ]    then    [ RETURN METHD CHANGED ]    or    [ RETURN METHD NOT CHANGED ]

**Note:** If your system has only one box, you should set the key return method to Manual Box Selection.

**Note:** This item is not available on Non-Random systems. See page 99 for more information about this feature.

## SET GROUP RELEASE TYPE

The Set Group Release Type allows the user to set how a group will be released. There are two types of group releases. The first is Release All Keys which will release each available key in the group. The second is Release Next Key which will ONLY release the next available key in the group. To set the Group Release Type, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:

↑ SET GROUP  
↓ RELEASE TYPE

- 3) Press **ENT**. The following will be displayed:

RELEASE  
↓ ALL KEYS

- 4) If you would like the KeyWatcher to release all the available keys in the group when a group is removed, press **ENT** the following will be displayed and the display will then automatically return to step 4. If you would like the KeyWatcher to release ONLY the next available key in the group, proceed to step 5.

ALL GROUP KEYS  
WILL RELEASE

- 5) If you would like the KeyWatcher to release ONLY the next available key in the group, press the down arrow key until the following is displayed:

↑ RELEASE  
NEXT KEYS

- 6) Press **ENT**. The following will be displayed and the display will then automatically return to step 3.

NEXT GROUP KEY  
WILL RELEASE

## RELAY INPUT ENABLE

The Relay Input Interface will work in conjunction with your card access system. It allows our keypad to only turn on when your card access system creates or closure after it verifies that a valid user is allowed to use the KeyWatcher. If your system supports a Relay Input Interface, you will need to enable this function in order for the KeyWatcher to recognize it. To connect your card access system to the KeyWatcher, see the Service & Maintenance section. The system must be connected properly prior to enabling this function on the KeyWatcher. To enable or disable your Relay Input Interface, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:

↑ RELAY INPUT  
↓ ENABLE

- 3) Press **ENT**. The following will be displayed:

RELAY INPUT  
ENABLE? Y/N

- 4) Use the arrow keys to select whether or not you would like the relay input enabled or disabled and press **ENT**. If 'Y' is selected proceed to step 5. If 'N' is selected the following will be displayed and the display will then automatically return to step 2.

RELAY INPUT  
DISABLED

- 5) If 'Y' was selected at step 4, the following will be displayed:

TEST RELAY  
INPUT NOW

- 6) At this point you will need to test the relay input so that the KeyWatcher will know that it is actually connected and is properly operating. Depending if the KeyWatcher gets the proper signal from the access control system, one of the following will be displayed and the display will then automatically return to step 2.

RELAY INPUT  
ENABLED

or

RELAY INPUT  
NOT ENABLED

- 7) If the message **Relay Input Not Enabled** is displayed, see the Service & Maintenance section to be sure that your Relay Input Interface is properly connected.

## **ALARM SOUND**

There are three settings for alarm sound. The first is Off (no alarm will sound, but the display will show See Alarm until the alarm is canceled). The second is On (alarm will sound and the display will show See Alarm until the alarm is canceled). The third is Five Minutes On (alarm will sound for five minutes and the display will show See Alarm until alarm is canceled). The default alarm sound setting is Off. To set the alarm sound, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:

↑ ALARM SOUND  
↓

- 3) Press **ENT**. The following will be displayed:

ALARM SOUND  
↓ OFF

- 4) If you would not like the alarm sound when an alarm is triggered, press **ENT**. The following will be displayed and the display will return to step 3. If you would like the alarm to sound until the alarm is canceled when an alarm is triggered, skip to step 5. If you would like the alarm to sound for five minutes when an alarm is triggered, skip to step 7.

ALARM SOUND  
DISABLED

- 5) If you would like the alarm to sound until the alarm is canceled, press the down arrow key at step 4 until the following is displayed:

↑ ALARM SOUND  
↓ ON

- 6) Press **ENT**. The following will be displayed and the display will return to step 5.

ALARM SOUND  
ENABLED

- 7) If you would like the alarm to sound for five minutes when an alarm is triggered, press the down arrow key at step 4 until the following is displayed:

↑ ALARM SOUND  
5 MINUTES

- 8) Press **ENT**. The following will be displayed and the display will return to step 7.

ALARM SOUND  
ENABLED: 5 MIN

## ARCHIVE WARNING ENABLE

Archive Warning operates in conjunction with our Key-Pro software. The Key-Pro software retrieves the transactions from the KeyWatcher. If the Archive Warning Enable is turned on, the KeyWatcher will keep track of the transactions that have not been retrieved from the Key-Pro software. If the number of transactions not retrieved exceeds 3200, the Archive Warning message will be displayed. Once the number of transactions not retrieved falls below 3200, the message will not be displayed. The default setting for the Archive Warning is off. To enable or disable Archive Warning, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:

↑ ARCHIVE WARNING  
↓           ENABLE

- 3) Press **ENT**. The following will be displayed:

ARCHIVE WARNING  
ENABLE?       Y/N

- 4) Use the arrow keys to select whether or not you would like Archive Warning enabled or disabled and press **ENT**. Depending on your selection, one of the following will be displayed and the display will then automatically return to step 2.

ARCHIVE WARNING  
ENABLED

or

ARCHIVE WARNING  
DISABLED

**Note:** If the transactions are not being gathered by the Key-Pro III software, transactions may be overwritten by the KeyWatcher and lost.



## ALARM RELAY LATCH ENABLE

Alarm Relay Latch determines how the relay alarm outputs react when an alarm is triggered. The outputs are sold as an option. If the Alarm Relay Latch is enabled, when an alarm output is triggered the contacts will switch and stay in that state until the alarm is canceled. If the Alarm Relay Latch is disabled, when an alarm output is triggered, the contacts will switch momentarily and then return to the original state. The default setting is disabled. To set the Alarm Relay Latch, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:

↑ ALARM RLY LATCH  
↓           ENABLE

- 3) Press **ENT**. The following will be displayed:

ALARM RLY LATCH  
ENABLE?           Y/N

- 4) Use the arrow keys to select whether or not you would like Alarm Relay Latch enabled or disabled and press **ENT**. Depending on your selection, one of the following will be displayed and the display will then automatically return to step 2.

ALARM RLY LATCH  
ENABLED

or

ALARM RLY LATCH  
DISABLED

**NOTE: ALARM OUTPUTS ARE SOLD AS AN OPTION.**

## DEPARTMENT ACCESS KEY REMOVAL ENABLE (OPTIONAL)

This option works in conjunction with the “Dual, or Triple User Key” features. When a Dual or Triple User Key is requested by a level 2-5 user, the KeyWatcher will require the second and/or third user (level 1-5) to be assigned to different departments. This feature may be enabled or disabled. If this feature is enabled and the second and/or third user is assigned to the same department as any of the other users requesting the key, that code will be considered an Invalid User Code. There are 16 departments that can be assigned. Be sure when programming your users that the correct departments are assigned. To set the department access key removal, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:

↑ DPT ACC KEY RMV  
↓           ENABLE

- 3) Press **ENT**. The following will be displayed:

DPT ACC KEY RMV  
ENABLE?                   Y/N

- 4) Use the arrow keys to select whether or not you would like Department Access Key Removal enabled or disabled and press **ENT**. Depending on your selection, one of the following will be displayed and the display will then automatically return to step 2.

DPT ACC KEY  
RMVSENABLED

or

DPT ACC KEY RMVS  
DISABLED

**Note:** If a level 1 user is the first user requesting to remove a Dual or Triple User Key, a second and/or third user will not be required to release the key.

## SECURE KEY RETURN

(OPTIONAL)

This feature operates in conjunction with return keys. There are five levels of Secure Key Return that may be set ONLY using the software. The default setting is disabled. To set the Secure Key Return, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:

↑ SECURE MULTI  
ACC KEY RTN

- 3) Press **ENT**. The following will be displayed:

SECURE MULTI  
ACC KEY RTN Y/N

- 4) Use the arrow keys to select whether or not you would like multi Key Access enabled or disabled and press **ENT**. Depending on your selection, one of the following will be displayed and the display will then automatically return to step 2.

SECURE KEY RNT  
ENABLED

or

SECURE KEY RNT  
DISABLED

**Note:** This feature is described in the Key Return section of this manual.

## **REMOVE KEY NOTE ENABLE**

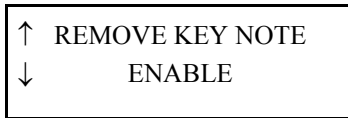
This function operates in conjunction with the Remove Key function. When the Remove Key Note is enabled and the requested key is setup to require a note, the user will be required to enter a Note ID. The Note ID can only be assigned through the Key-Pro III software. In addition to the Note ID, a comment can also be entered when the key is being removed. This comment may be either required or optional and may be setup to be entered as a numeric or alphanumeric entry. When this feature is enabled, the user will choose whether or not the comment will be required and then select if it will be entered as a numeric or alphanumeric entry. The setting for the key to be setup to require a note when being removed or returned is located under the Edit Key Menu. To enable or disable the remove key note, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:



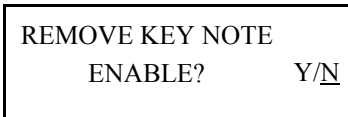
SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:



↑ REMOVE KEY NOTE  
↓ ENABLE

- 3) Press **ENT**. The following will be displayed:



REMOVE KEY NOTE  
ENABLE?      Y/N

- 4) Use the arrow keys to select whether or not you would like the Remove Key Note enabled or disabled and press **ENT**. If the feature is enabled, the user will need to enter whether or not the comment is required or optional. In addition the user will need to determine if the note will be entered as a numeric or alphanumeric entry.

## **RETURN KEY NOTE ENABLE**

This function operates in conjunction with the Return Key function. The Return Key Note works the same as described above for the Remove Key Note.

## COM 2 PORT FUNCTION

This feature allows the programmer to change the function for the com 2 port on the KeyWatcher. There are two settings for the com 2 port, Printer or BIO Fingerprint Reader. The default setting for the com 2 port function is printer. To set the com 2 port function, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

↓  
SET DATE/TIME

- 2) Press the down arrow key until the following is displayed:

↓  
COM 2 PORT  
FUNCTION

- 3) Press **ENT**. The following will be displayed:

↓  
PRINTER

- 4) If you would like the com 2 port function set for Printer, press **ENT**. The following will be displayed and the display will then automatically return to step 3. If you would like the com 2 port function set for BIO Fingerprint Reader, proceed to step 5.

COM PORT SET FOR PRINTER      or      COM 2 PORT NOT CHANGED

- 5) If you would like the com 2 port function set for BIO Fingerprint Reader, press the down arrow key until the following is displayed:

↑  
BIO FINGERPRINT  
READER

- 6) Press **ENT**. The following will be displayed and the display will then automatically return to step 3.

COM PORT SET FOR BIO READER      or      COM 2 PORT NOT CHANGED

### IMPORTANT NOTES REGARDING COM 2 PORT FUNCTION

If a BIO Fingerprint Reader is being used, it must still be enabled after the com 2 port function is set. Bio Fingerprint enable page 18.

Any menu navigation item on the KeyWatcher that references printing will be removed.

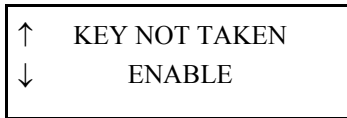
## KEY NOT TAKEN ENABLE

The KeyWatcher is equipped with a feature that will sound an alarm if a key that is requested is not removed from the system. The Key Not Taken alarm may be enabled or disabled. The KeyWatcher is shipped with the Key Not Taken Alarm turned off. To enable or disable the Key Not Taken Alarm, follow these steps:

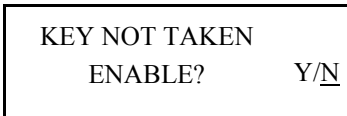
- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:



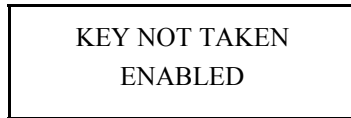
- 2) Press the down arrow key until the following is displayed:



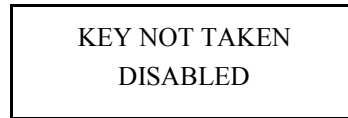
- 3) Press **ENT**. The following will be displayed:



- 4) Use the arrow keys to select whether or not you would like the Key Not Taken Alarm enabled or disabled and press **ENT**. Depending on your selection, one of the following will be displayed and the display will then automatically return to step 2.



or



## LCD CONTRAST

This feature allows the programmer to adjust the contrast of the display. This is useful for users with different lighting. To adjust the LCD Contrast, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:



- 2) Press the down arrow key until the following is displayed:



- 3) Press **ENT**. The following will be displayed:



- 4) Use the up and down arrow keys to adjust the display contrast. When set press **ENT**.

## BIO GLOBAL THRESHOLD (OPTIONAL)

This feature operates in conjunction with the Bioscrypt reader that is supplied as an option. This allows the threshold (sensitivity) of the Fingerprint reads to be adjusted. To modify the BIO Global Threshold, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

SET DATE/TIME  
↓

- 2) Press the down arrow key until the following is displayed:

↑ BIO GLOBAL  
↓ THRESHOLD

- 3) Press **ENT**. The following will be displayed:

PRESENT  
THRESHOLD IS: 1

or

ENTER NEW LEVEL  
[(HIGH) 1-5]: \_

- 4) The highest and most secure setting is 1 but is also the most sensitive setting. Keep in mind that the higher the setting the more incorrect reads user's may get from the fingerprint reader. Enter a Threshold level between 1-5 and press **ENT**. The following will be displayed:

THRESHOLD  
CHANGED

**Note:** Keep in mind that there are two threshold settings for Biometric Fingerprint reader. The first is the Global Threshold and the second is the User Threshold. The system will always use the Lower threshold value of the two settings. For instance, if you have a Global setting of 3 and a user setting of 1, the fingerprint reader will use a threshold of 3 for this user.

The fingerprint reader is intended to keep the global threshold set to a higher value and modify a user's individual threshold lower.

## **PC COMM. PORT**

This feature allows the programmer to change the communication setting on the KeyWatcher. This may be necessary for users with a Modem. The default setting for the PC Comm. Port is Direct / LAN. To set the PC Comm. Port, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Setup**. The following will be displayed:

↓  
SET DATE/TIME

- 2) Press the down arrow key until the following is displayed:

↑ PC COMM. PORT

- 3) Press **ENT**. The following will be displayed:

DIRECT / LAN  
↓ 38400 BAUD

- 4) If you would like the KeyWatcher to communicate with the software using a Direct / Lan connection, press **ENT**. The following will be displayed and the display will then automatically return to step 3. If you would like the KeyWatcher to communicate with the software using a Modem connection, proceed to step 5.

PC COMM. PORT  
CHANGED

      or      

PC COMM. PORT  
NOT CHANGED

- 5) If you would like the KeyWatcher to communicate with the software using a Modem connection, press the down arrow key until the following is displayed:

↑ MODEM  
19200 BAUD

- 6) Press **ENT**. The following will be displayed and the display will then automatically return to step 3.

PC COMM. PORT  
CHANGED

      or      

PC COMM. PORT  
NOT CHANGED

**IMPORTANT NOTE:**

Changing the PC COMM. PORT setting may cause your software to no longer communicate with the KeyWatcher.



# DATABASE MENU

The database menu contains the vital programming of the KeyWatcher. The names and user ID's are programmed from this menu, the Smart keys are assigned and named, and all of this information may be viewed, printed, changed, or deleted by accessing this menu. In this section, only the programming capabilities of this menu will be discussed. Other sections of this manual provide information on other functions.

## ADD KEYS

This function allows Smart keys to be added to the system. When this function is performed, the Smart keys identity is learned by the KeyWatcher and stored in memory. A chart is provided on page 135 to help in the planning of Smart key setup. To add keys to the system, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
ADD
↓
```

- 2) Press **ENT**. The following will be displayed:

```
ADD
KEY
↓
```

- 3) To add new keys, press **ENT**. The following will be displayed: (If your system has only one box, the following will be skipped)

```
CHECKING          then          WHICH BOX
FOR OPEN SLOTS   [1-15]: _
```

- 4) Enter the number of the box that the key will be added to and press **ENT**. The following will be displayed:

```
OPEN DOOR
BOX ??
```

- 5) Open the door to the box number indicated. The Following will be displayed:

```
KEY NO: 0060          then          INSERT KEY IN
NAME: KEY0060        BOX ??
```

- 6) Insert one key into the box number indicated. The following will be displayed and the system will then return to step five and allow the user to add another key. When you have completed adding keys, simply close the door and the display will automatically return to step 2:

```
KEY ????
ADDED
```

### IMPORTANT NOTE FOR USERS WITH OPTIONAL NON-RANDOM FEATURE

When adding keys to a system with Non-Random feature, keep in mind that a location that has already been assigned a key will consider any key INVALID. In order to add a key to a Non-Random system, the location must be available. For more information pertaining to the Non-Random feature refer to page 99.

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**Note:** The Key number will vary depending what the next key to be added to your system is. For example, if the last key you added was 59, then the new key will be 60 regardless of where it is placed in the KeyWatcher. The KeyWatcher will name the new key KEY 060 which can be changed. If the user were to place 30 keys in the box prior to powering up the system, the KeyWatcher would automatically assign these keys 1 through 30 in rows starting with module 1 in the upper left.

**Note:** If the KeyWatcher has the maximum number of keys already added to the system, the following will be displayed:

CAN'T ADD A KEY  
TOO MANY KEYS

**Note:** If the box selected is full, the following will be displayed:

BOX IS  
FULL

**Note:** Edit will allow you to change the key name. The key name has been temporarily named, be sure to note the number of each key as you are adding them into the KeyWatcher.

## ADD GROUP

A group consists of multiple keys that are assigned by the user. The KeyWatcher is capable of storing 250 groups. Each of these groups may be customized for accessing up to 100 keys. Users may also remove groups by all keys or releasing only the next available key in the group (See group release type on page 25 for more information). There is a chart on page 136 to help setup your groups. To program a group, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
ADD
↓
```

- 2) Press **ENT**. The following will be displayed:

```
ADD
↓ KEY
```

- 3) Press the down arrow key until the following is displayed:

```
↑ ADD
↓ GROUP
```

- 4) Press **ENT**. The following will be displayed:

```
ENTER GROUP NUM
[1-250]: _
```

- 5) Enter the number of the group you wish to program and press **ENT**. The following will be displayed:

```
GROUP NUMBER ???      then      GROUP KEYS (0)
NAME: GROUP????      _
```

- 6) Enter the numbers of the keys that you wish to be in the group, separated by **ENT**. Press **ENT** twice when you have finished entering all the key numbers and the group entry will be completed. For example, if you want keys 2, 3, 7, and 12 to be in this group, you would press **2 ENT 3 ENT 7 ENT 12 ENT ENT**. The following will be displayed:

```
GROUP NAME
GROUP005
```

- 7) Enter the Group Name using the alpha numeric keypad, then press **ENT**. You will then be prompted to select the Group Release type. If you would like the KeyWatcher to release all the available keys in the group when a group is removed, press **ENT** on **RELEASE ALL KEYS**. If you would like the KeyWatcher to release **ONLY** the next available key in the group press the down arrow key until **RELEASE NEXT KEY** is displayed and press **ENT**. The Group will be added and the display will return to step 4.

## USERS / USER RESTRICTIONS / TIME ZONES

(EXPLANATION & EXAMPLE)

**User:**

When a User is added to the system, there are settings that determine how the system will respond when that User accesses the KeyWatcher. The following defines all functions pertaining to a User when they are being added.

- ◆ **USER NUM**  
This is a 4 digit number (0000 to 1999) that will become the user's ID#.
- ◆ **USER PIN**  
This is a 4 digit number that will become the user's Personal Identification Number. Depending on the user's access level, the user may be able to change their PIN # at any time.
- ◆ **ONE TIME USERCODE**  
This function assigns a "Temporary User". A One-Time User Code can only remove keys from the system a single time (once the code is used to remove keys, it will not be able to remove any keys even if the user is given access to them). Once all the keys removed by the One-Time user are returned, the One-Time User Code will be deleted by the system and the user will *NOT* be able to access the system with that User Code again. One-Time User Codes are automatically assigned an access level 4.

**IMPORTANT INFORMATION WHEN USING THE ONE TIME USER CODE FEATURE**

If a One-Time user performs an "Emergency Release", the emergency release will not affect the users capability to remove keys a single time. Even if the user has already removed keys One-Time, they will be able to perform an emergency release if they are given the capability. For more information see the emergency release section.

**EXAMPLE:** A One-Time User Code was given access to keys 1, 2, 3, & 4. The One-Time UserCode was then used to remove keys 3 & 4. If the One-Time UserCode is used to access the system, the user will only be able to return keys. Once keys 3 & 4 are returned, regardless of who returns them, the One-Time User Code is deleted.

- ◆ **EMERGENCY RELEASE**  
This function allows a user (regardless of access level or access to the keys) to remove all of the keys in the system in the event of an emergency. See page 95 for more information.
- ◆ **MULTIPLE KEY ACCESS**  
This function will allow the user to remove multiple keys from the system provided they have the proper access. If the user does not have multiple key access they will only be allowed to have one key out of the system at any given time.
- ◆ **ACCESS LEVEL**  
Determines which menus the user will have access to within the KeyWatcher. The programmer should have full access. A normal user should not have access to the menus and a supervisor should only have access to generating reports and canceling alarms. The five levels of access are shown below:

USER ACCESS LEVELS	
<b>ALL ACCESS LEVELS HAVE THE ABILITY TO REMOVE &amp; RETURN KEYS AND GROUPS.</b>	
<b>LEVEL 1:</b>	Provides the user with complete access to <b>ALL FUNCTIONS. (Programmer)</b>
<b>LEVEL 2:</b>	Allows the user to <b>CHANGE PIN</b> . Also allows access to <b>ENROLL</b> and <b>DELETE</b> level 2 thru <b>LEVEL 5</b> user cards or fingerprints, <b>GENERATE REPORTS</b> and <b>ALARMS</b> .
<b>LEVEL 3:</b>	Allows the user to <b>CHANGE PIN</b> .
<b>LEVEL 4:</b>	No additional functions.
<b>LEVEL 5:</b>	Allows the user access to <b>GENERATE REPORTS</b> and <b>ALARMS</b> .

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◆ **DEPARTMENT ID (OPTIONAL) (0-15)**

This option works in conjunction with the “Dual, or Triple User Key” features. When a Dual or Triple User Key is requested by a level 2-5 user, the KeyWatcher will require the second and/or third user (level 1-5) to be assigned to different departments. If this feature is enabled and the second and/or third user is assigned to the same department as any of the other users requesting the key, that code will be considered an Invalid User Code.

◆ **RESTRICTED KEYS**

This function determines whether or not the user will have access to all the keys in the system or need to be assigned restrictions. If “Y” is selected this user will need to be assigned keys to which they will have access. If “N” is selected this user will have full access to all current and future keys that are added to the system.

◆ **INSTANT KEY RELEASE**

This function allows the system to release and return keys automatically when a user with menu access level 3 or 4 enters their ID-PIN Number followed by a “1” or a user initiates a Card Read using a Card Reader.

### **User Restrictions:**

A User Restriction is used to assign users access to keys. This can only be done after the user is added to the system and the “Restricted keys Y/N” was set to YES. If the “Restricted Keys Y/N” was set to NO, the user will have access to all keys, at all times. Each user will be allowed 25 restrictions to be added to their restriction node. A restriction may consist of a single key restriction or a group restriction. Prior to Adding User Restrictions, the Time Zones that will be used must be defined. Please keep in mind that there are two types of Time Zones. They are Specific and Duration.

### **Groups:**

Groups are used to assign restrictions to a user. If a Group is modified, the restrictions for the users with access to that Group will also be modified.

Example: If a Group is added that consists of keys 1, 2, 3, 80, 84 and 86, any user assigned a restriction containing that Group will have access to those keys. If the Group is modified and keys 1 and 86 are deleted from the Group, any user who had access to that Group will no longer have access to keys 1 and 86.

### **Specific Time Zone:**

A Specific Time Zone is used when you want the user to be able to have a key out between two times:

Example: If you want a user to be able to access a key between 8:00 and 17:00, you must add this ‘Specific’ Time Zone first.

### **Time Duration:**

A Duration Time Zone is used when the key will be allowed out for length of time. The Duration Time Zone does not determine when the key may be removed.

Example: If you want a user to be able to have a key out for 5 hours, you must add this ‘Duration’ Time Zone first. I added this Time Zone under number 25.

Once the Time Zones have been added to the system, you can add your User Restrictions. User Restrictions allow a user to access keys only during certain time periods.

The following is an example of how you can restrict user 001 to key 22 between the hours of 8:00 and 17:00 on Monday, Tuesday, Wednesday, Thursday and Friday. Select Add User Restrictions:

<b>Enter user Num:</b>	0001	<b>Enter key Num:</b>	22	<b>Select Time Zone?</b>	YES
<b>Which Time Zone?</b>	1 (between 8:00 and 17:00)	<b>Days of Week:</b>	sMTWTFs		

**Note:** Notice that Saturday and Sunday are lower case. This indicates the user will NOT be able to access the key(s) on those days of the week.

When all of the above information has been entered, user 0001 will be able to access key 22 between the hours of 8:00 and 17:00 on Monday, Tuesday, Wednesday, Thursday, and Friday.

**Note:** Be sure that the time and date are set correctly on the KeyWatcher’s display.

## ADD USER

The KeyWatcher is capable of storing up to 2000 user codes. Each of these codes may be customized for access to any or all of the keys in the system. Time limits may be placed on any key and users may be restricted to certain keys on certain days of the week, etc. There is a chart on page 137 to help program users. To program user codes, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
      ADD
  ↓
```

- 2) Press **ENT**. The following will be displayed:

```
      ADD
  ↓      KEY
```

- 3) Press the down arrow key until the following is displayed:

```
  ↑      ADD
  ↓      USER
```

- 4) To add a new user, press **ENT**. The following will be displayed:  
If the maximum number of users are already programmed, the KeyWatcher will display a message, then exit to the Main Menu. For more information on editing existing user information, see page 58.

```
ENTER USER NUM
[xxxx]: _
```

- 5) Enter a 4 digit number (0000 to 1999) that will become this person's user ID # and press **ENT**. If a user ID # is entered that already exists in the system, the KeyWatcher will inform you and return to this screen. Once a valid 4 digit number is entered, the following will be displayed:

```
ENTER USER PIN
[xxxx]: _
```

- 6) Enter the 4 digit number that will become this person's PIN number. Any 4 digit number may be used. The top of the next page will be displayed:

### IMPORTANT NOTE FOR USERS WITH A CARD READER ENABLED

Users with a Card Reader may also access the KeyWatcher with a Reader. To program a user with a Card Reader, this feature **must** first be enabled. See the Card Reader Enable section (page 17) for more information. When adding User Codes with the Card Reader Enabled, the user will be prompted to SWIPE CARD NOW after the users pin is entered at step 6. At this point, a read should be initiated on the reader being used. If the read was accepted, a message will indicate this and step 7 will appear. If for any reason the read was not accepted or no read occurred, you will be prompted and asked if you would like to try again.

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ONE TIME  
USERCODE? Y/N

- 7) If you would like this user to be assigned as a One-Time User Code, select 'Y' and press **ENT**. If you do not want this user to be assigned as a One-Time User Code, select 'N' and press **ENT**. The following will be displayed:

ENTER USER'S  
FIRST NAME

then

USER0000

- 8) Enter the User's Name using the alpha numeric keypad, then press **ENT**. The following will be displayed:

ENTER USER'S  
LAST NAME

then

\_

- 9) Enter the User's Name using the alpha numeric keypad, then press **ENT**. The following will be displayed:

EMERGENCY  
RELEASE? Y/N

**Note:** This function allows a user to remove all of the keys in the system in the event of an emergency.

- 10) If you would like this user to be able to perform the "Emergency Release" feature, select 'Y' and press **ENT**. If you do not want this user to be able to perform the "Emergency Release" feature, select 'N' and press **ENT**. The following will be displayed:

MULTIPLE KEY  
ACCESS? Y/N

- 11) If you would like this user to have multiple key access, select 'Y' and press **ENT**. You will then be prompted to enter the number of keys the user can have out at any given time may be set from 0-15 (0 being ALL). If you do not want this user to have multiple key access, select 'N' (single key only) and press **ENT**. The following will be displayed:

SET ACCESS  
LEVEL [1-5] : \_

USER ACCESS LEVELS	
<b>ALL ACCESS LEVELS HAVE THE ABILITY TO REMOVE &amp; RETURN KEYS AND GROUPS.</b>	
<b>LEVEL 1:</b>	Provides the user with complete access to <b>ALL FUNCTIONS. (Programmer)</b>
<b>LEVEL 2:</b>	Allows the user to <b>CHANGE PIN</b> . Also allows access to <b>ENROLL</b> and <b>DELETE</b> level 2 thru LEVEL 5 user cards or fingerprints, <b>GENERATE REPORTS</b> and <b>ALARMS</b> .
<b>LEVEL 3:</b>	Allows the user to <b>CHANGE PIN</b> .
<b>LEVEL 4:</b>	No additional functions.
<b>LEVEL 5:</b>	Allows the user access to <b>GENERATE REPORTS</b> and <b>ALARMS</b> .

**Note:** If your system was supplied with the OPTIONAL DEPARTMENT ID feature, you will be prompted to enter the DEPT ID (0-15) prior to the next step.

- 12) Enter the access level for the user being added and press **ENT**. The top of the next page will be displayed:

**Continued on the following page.**

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RESTRICTED  
KEYS? Y/N

- 13) If this user will **NOT** have access to keys until “User Restrictions” are added, select ‘Y’ and press **ENT**. If this user **WILL** have full access to all current and future keys that are added to the system, select ‘N’ and press **ENT**. The following will be displayed if the user being added is a menu access 3 or 4, otherwise the display will skip to step 15.

INSTANT KEY REL  
Y/N

- 14) If you would like this user to have Instant Key Release, select ‘Y’ and press **ENT**. If you do not want this user to have Instant Key Release, select ‘N’ and press **ENT**. The following will be displayed:

USER  
ADDED

then

ADD MORE USERS?  
Y/N

- 15) Select ‘Y’ if you would like to add more users and ‘N’ if you have finished adding users and press **ENT**. If ‘Y’ is selected the display will return to step 5 on the previous page. If ‘N’ is selected the display will return to step 4.

**Note:** If you enter a user number that is already being used, a message will be displayed indicating the User Code is already assigned to a user. The display will then automatically return to step 4.



## ADD USER RESTRICTIONS (ON KEYS)

This menu function allows the system programmer to assign keys to a new or existing user. Each user will be allowed 25 restrictions to be added to their restriction node. A restriction may consist of a single key restriction or a group restriction. There are charts on page 137 & 138 to help program user restrictions. To add user restrictions, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
ADD
↓
```

- 2) Press **ENT**. The following will be displayed:

```
ADD
KEY
↓
```

- 3) Press the down arrow key until the following is displayed:

```
↑ ADD USER
↓ RESTRICTIONS
```

- 4) Press **ENT**. The following will be displayed:

```
RESTRICT
KEYS
↓
```

- 5) Press **ENT**. The following will be displayed:

```
ENTER USER NUM
[xxxx]: _
```

- 6) Type in the user ID number that you **want** to allow key access to and press **ENT**. The display will then indicate the restriction node status for this user and the following will be displayed:

```
RESTRICTION NODE          then          ENTER KEY NUM
USED: 00  FREE: 25                [1-2000]: _
```

- 7) Type in the Key number that you **want** this user to be able to access and press **ENT**. The following will be displayed:

```
SELECT TIME
ZONE?      Y/N
```

- 8) If you would like this user to have a time zone on this key restriction, select 'Y' and press **ENT**. The top of the next page will be displayed. If you would like this user to be able to access this key at any time, select 'N' and press **ENT**. The display will then skip to step 10.

WHICH TIME ZONE  
[1-99]: \_

- 9) Enter the number of the time zone that will define what times this user can have access to this key and press **ENT**. If an invalid time zone number or the time zone has not been defined the display will return to step 7. The following will be displayed if the time zone is valid.

DAYS OF WEEK  
SMTWTFS

- 10) The days of the week that have capital letters are the days that this user **will** have access to this key and the days of the week that have small letters are the days that this user **will not** have access to this key . To change the day of the week from capital to small letters, place the cursor under the letter and press **CLR**. The following will be displayed:

RESTRICTION  
ADDED

then

MORE KEYS?  
Y/N

- 11) If you would like to restrict more keys for this user, use the arrow keys to select ‘Y’ for yes and press **ENT**. The display will return to step 6 and allow the user to restrict another key.

If you do not want to restrict any more keys for this user, select ‘N’ for no and press **ENT**. The display will return to step 4. When you are finished restricting keys press **CLR** at step 4 to exit to the title screen.

**Note:** If you enter a user ID # for a user who was given full access to all keys when he was first entered into the system, the following will be displayed and the display will then automatically return to step 4.

USER MAY  
ACCESS ALL KEYS

**Note:** If an attempt is made to add a restriction that already exists, the following will be displayed and the display will then automatically return to step 7.

RESTRICTION  
ALREADY EXISTS

**Note:** If the key number entered does not exist (is not part of the system), the following will be displayed and the display will then automatically return to step 7.

UNKNOWN KEY

---

**IMPORTANT NOTE REGARDING KEY RESTRICTIONS**

If a Time Zone is modified or changed, it will also change all key restrictions that pertain to the Time Zone.

---

## ADD USER RESTRICTIONS (ON GROUPS)

This menu function allows the system programmer to assign groups of keys to a new or existing user. Please note that the group must be programmed before you can add any restrictions on a group. For more information on groups, see the adding groups section (page 39). Each user will be allowed 25 restrictions to be added to their restriction node. A restriction may consist of a single key restriction or a group restriction. There are charts on page 137 & 138 to help program user restrictions.

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
      ADD
  ↓
```

- 2) Press **ENT**. The following will be displayed:

```
      ADD
  ↓      KEY
```

- 3) Press the down arrow key until the following is displayed:

```
  ↑      ADD USER
  ↓      RESTRICTIONS
```

- 4) Press **ENT**. The following will be displayed:

```
      RESTRICT
  ↓      KEYS
```

- 5) Press the down arrow key until the following is displayed:

```
  ↑      RESTRICT
      GROUPS
```

- 6) Press **ENT**. The following will be displayed:

```
ENTER USER NUM
[xxxx]: _
```

- 7) Type in the user ID number that you **want** to allow key access to and press **ENT**. The display will then indicate the restriction node status for this user and the following will be displayed:

```
RESTRICTION NODE
USED: 00  FREE: 25
```

then

```
ENTER GROUP NUM
[1-25]: _
```

- 8) Type in the Group number that you **want** this user to be able to access and press **ENT**. The top of the next page will be displayed:

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SELECT TIME  
ZONE? Y/N

- 9) If you would like this user to have a time zone on these keys, select 'Y' and press **ENT**. The following will be displayed. If you would like this user to be able to access these keys at any time, select 'N' and press **ENT**. The display will then skip to step 11.

WHICH TIME ZONE  
[1-99]: \_

- 10) Enter the number of the time zone that will define what times this user can have access to these keys and press **ENT**. If an invalid time zone number or the time zone has not been defined the display will return to step 9. The following will be displayed if the time zone is valid.

DAYS OF WEEK  
SM T W T F S

- 11) The days of the week that have capital letters are the days that this user **will** have access to these keys. The days of the week that have small letters are the days that this user **will not** have access to these keys. To change the day of the week from capital to small letters, place the cursor under the letter and press **CLR**. Press **ENT** when the days of the week are set correctly. The following will be displayed:

RESTRICTION  
ADDED

then

MORE GROUPS?  
Y/N

- 12) If you would like to restrict more groups for this user, use the arrow keys to select 'Y' for yes and press **ENT**. The display will return to step 7 and allow the user to restrict another group.

If you do not want to restrict any more keys for this user, select 'N' for no and press **ENT**. The display will return to step 6.

**Note:** If you enter a user number that the user may access all keys, the following will be displayed:

USER MAY  
ACCESS ALL KEYS

**Note:** If you enter a group number that does not exist, the following will be displayed:

GROUP DOES  
NOT EXIST

### IMPORTANT NOTE REGARDING GROUP RESTRICTIONS

If a Group or Time Zone is modified or changed, it will also change all restrictions that pertain to the Group or Time Zone.

Group restrictions can be used to add multiple restrictions for the same keys.

## ADD TIME ZONES

A time zone is used when restricting a user from keys between a set of times. There are 2 types of time zones that can be programmed. The first is a specific time period which allows the user to select the start and end time that the key may be out. The second is a duration which will allow the user to have a key out for a certain length of time. The KeyWatcher allows you to store 99 time zones. There is a worksheet on page 139 to help program time zones.

### Add Specific Time Zone:

To program a time zone for a specific time period, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

ADD  
↓

- 2) Press **ENT**. The following will be displayed:

ADD  
↓ KEY

- 3) Press the down arrow key until the following is displayed:

↑ ADD  
TIME ZONE

- 4) Press **ENT**. The following will be displayed:

ADD SPECIFIC  
↓ TIME PERIOD

- 5) Press **ENT**. The following will be displayed:

WHICH TIME ZONE  
[1-99]: \_

- 6) Enter the number of the time zone you wish to add and press **ENT**. The following will be displayed:

TIME ZONE: ??  
NAME: "ZONE ??"

then

ENTER START TIME  
[HH:MM]: \_ :

- 7) Enter the time (24 hour only) that the time zone will begin and press **ENT**. The top of the next page will be displayed:

**Note:** The start time is when the user will be able to remove the key and the end time is when the user must have the key returned by. The maximum start or end time is 23:59 and the time between the start and end time must be at least one minute.

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TIMELIMIT WITHIN  
TIME ZONE?            Y/N

- 8) If you would like this time zone to have time limit that the key can be out, select 'Y' and press **ENT** and enter the time the key will be allowed out. If you would not like the time zone to have a limit that the key can be out, select 'N' and press **ENT**. The following will be displayed.

ENTER END TIME  
[HH:MM]:            \_    :

- 9) Enter the time (24 hour format) that the time zone will end and press **ENT**. The following will be displayed:

TIME ZONE  
ADDED

- 10) Enter the Time Zone Name using the alpha numeric keypad, then press **ENT**. The following will be displayed

TIMEZONE  
ALREADY EXISTS

**Note:** If a time zone that already exists is chosen, the following will be displayed:

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## Add Duration Time Zone:

To program a time zone for a duration, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

ADD  
↓

- 2) Press **ENT**. The following will be displayed:

ADD  
↓      KEY

- 3) Press the down arrow key until the following is displayed:

↑      ADD  
         TIME ZONE

- 4) Press **ENT**. The following will be displayed:

ADD SPECIFIC  
↓      TIME PERIOD

- 5) Press the down arrow key until the following is displayed:

↑      ADD TIME  
         DURATION

- 6) Press **ENT**. The following will be displayed:

WHICH TIME ZONE  
[1-99]: \_

- 7) Enter the number of the time zone you wish to add and press **ENT**. The following will be displayed:

TIME ZONE: ?? NAME: "ZONE ??"	then	DURATION TIME [HH:MM]:      _    :
----------------------------------	------	---------------------------------------

- 8) Enter the duration time (24 hour format) that the key will be allowed out and press **ENT**. The top of the next page will be displayed:

**Note:** There is only one time that needs to be entered for the duration time zone. The maximum duration time is 23:59 and the minimum duration time is 00:01 (1 minute).

TIME ZONE NAME  
ZONE01

- 9) Enter the Time Zone Name using the alpha numeric keypad, then press **ENT**. The following will be displayed:

TIME ZONE  
ADDED

**Note:** If a time zone that already exists is chosen, the following will be displayed:

TIME ZONE ??  
NOT AVAILABLE



## EDITING PROGRAMMED INFORMATION

This section explains how to change information that is programmed into the KeyWatcher. For example, key names and user information may be changed using these instructions.

### EDIT KEY NAME

When keys are added to the system, the KeyWatcher assigns a default name. This name can be changed. To edit the name of an installed key, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
ADD
↓
```

- 2) Press the down arrow key until the following is displayed:

```
↑   EDIT
↓
```

- 3) Press **ENT**. The following will be displayed:

```
EDIT
KEY
↓
```

- 4) Press **ENT**. The following will be displayed:

```
EDIT
KEY NAME
↓
```

- 5) Press **ENT**. The following will be displayed:

```
ENTER KEY NUMBER
[1-2000]: _
```

- 6) Enter the number of the key you wish to edit the name of and press **ENT**. The following will be displayed:

```
KEY NAME:
KEY0001
```

- 7) Enter the Key Name using the alpha numeric keypad, then press **ENT**. The following will be displayed and the display will then return to step 6. When you have finished Editing Key Names, press **CLR**.

```
KEY NAME
CHANGED
```

**Note:** If a key number that does not exist is entered, KEY NOT FOUND will be displayed.

## EDIT KEY ACCESS

(OPTIONAL)

This option allows the programmer to set a key as a “Single, Dual, or Triple User Key”. When keys are added to the system, the KeyWatcher default is “Single User Key”. For information on removing a key with either “Single, Dual, or Triple User Access, refer to the Remove Keys section. To edit key access for an installed key, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
ADD
↓
```

- 2) Press the down arrow key until the following is displayed:

```
↑ EDIT
↓
```

- 3) Press **ENT**. The following will be displayed:

```
EDIT
↓ KEY
```

- 4) Press **ENT**. The following will be displayed:

```
EDIT
↓ KEY NAME
```

- 5) Press the down arrow key until the following is displayed:

```
↑ EDIT
KEY ACCESS
```

- 6) Press **ENT**. The following will be displayed:

```
ENTER KEY NUMBER
[1-2000]: _
```

- 7) Enter the number of the key you wish to edit access for and press **ENT**. Figure (7a) will be displayed. Press the down arrow once for (7b) & twice for (7c):

7a) 

```
↓ SINGLE USER
KEY ACCESS
```

7b) 

```
↑ DUAL USER
↓ KEY ACCESS
```

7c) 

```
↑ TRIPLE USER
KEY ACCESS
```

- 8) At this point you can change the “Key Access” for any key installed in the system.

7a) If you would like a specific key to be a “Single User Key”, press **ENT** at 7a) and return to step 7.

7b) If you would like a specific key to be a “Dual User Key”, press **ENT** at 7b) and return to step 7.

7c) If you would like a specific key to be a “Triple User Key”, press **ENT** at 7c) and return to step 7.

When you have finished editing key access, press **CLR** at step 7 to return to the Edit Key Access menu.

## **EDIT GROUP**

(NAME)

Edit group name allows the programmer to change the name of the group.

To edit a group name, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

↓	ADD
---	-----

- 2) Press the down arrow key until the following is displayed:

↑	EDIT
↓	

- 3) Press **ENT**. The following will be displayed:

↓	EDIT
	KEY

- 4) Press the down arrow key until the following is displayed:

↑	EDIT
↓	GROUP

- 5) Press **ENT**. The following will be displayed:

↓	EDIT
	GROUP NAME

- 6) Press **ENT**. The following will be displayed:

ENTER GROUP NUM
[1-250]: _

- 7) Enter the number of the group you wish to edit the name of and press **ENT**. The following will be displayed:

GROUP NAME:
<u>G</u> ROUP001

- 8) Enter the Group Name using the alpha numeric keypad, then press **ENT**. The following will be displayed and the display will return to step 6.

GROUP NAME
CHANGED

**Note:** If a group number that does not exist is entered, GROUP NOT FOUND will be displayed.

## EDIT GROUP (KEYS)

Edit group keys allows the programmer to add keys to or delete keys from an already existing group. Keep in mind that editing a group will change all user restrictions that apply to that group.

To edit group keys, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
ADD
↓
```

- 2) Press the down arrow key until the following is displayed:

```
↑   EDIT
↓
```

- 3) Press **ENT**. The following will be displayed:

```
EDIT
↓   KEY
```

- 4) Press the down arrow key until the following is displayed:

```
↑   EDIT
↓   GROUP
```

- 5) Press **ENT**. The following will be displayed:

```
EDIT
↓   GROUP NAME
```

- 6) Press the down arrow key until the following is displayed:

```
↑   EDIT
    GROUP KEYS
```

- 7) Press **ENT**. The following will be displayed:

```
ADD KEYS
↓   TO GROUP
```

- 8) If you would like to add more keys to a group, press **ENT**. The following will be displayed. If you would like to delete keys from a group press the down arrow key and skip to step 11.

```
ENTER GROUP NUM
[1-250]: _
```

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- 9) Enter the number of the group that you want to add the keys to and press **ENT**. The following will be displayed:

GROUP KEYS (5)  
—

- 10) Enter the numbers of the keys that you wish to add to the group, separated by **ENT**. Press **ENT** twice when you have finished entering all the key numbers and the group keys will be added. For example, if this group has keys 1, 4, and 5 already in it and want to add keys 2, 3, 7, and 12 to this group, you would press **2 ENT 3 ENT 7 ENT 12 ENT ENT**. The following will be displayed and the display will return to step 7.

GROUP  
KEYS CHANGED

- 11) If you would like to delete keys from a group press the down arrow key at step 8. The following will be displayed:

DELETE KEYS  
↓ FROM GROUP

- 12) Press **ENT**. The following will be displayed:

ENTER GROUP NUM  
[1-250]: \_

- 13) Enter the number of the group that you want to delete keys from and press **ENT**. The following will be displayed:

DELETE KEY 0001?  
Y/N

- 14) If you would like to delete the key shown on your display from this group select 'Y' and press **ENT**. If you would not like to delete the key shown on your display from this group select 'N' and press **ENT**. You will then be asked this question for each key in this group. After you have finished each key in the group, the following will be displayed and the display will return to step 7. (If all the keys in the group are deleted, the group will automatically be deleted.)

GROUP KEYS  
CHANGED

**Note:** If the group selected had no changes made to it, the following will be displayed:

GROUP KEYS  
NOT CHANGED

## EDIT USER MENU

The KeyWatcher allows the programmer to edit a users information. Any item pertaining to a user may be changed. To edit the users information, you must first access the Edit User Menu. To access the Edit User Menu, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

↓	ADD
---	-----

- 2) Press the down arrow key until the following is displayed:

↑	EDIT
↓	

- 3) Press **ENT**. The following will be displayed:

↓	EDIT
	KEY

- 4) Press the down arrow key until the following is displayed:

↑	EDIT
↓	USER

- 5) You are now at the **Edit User Menu**. Any of the following items may be changed for a user:

User Item:	Page:
User Name	59
User PIN	60
Emergency Release	61
Card Access (Optional Item)	62
Menu Access	64
Department ID	65
Restricted Keys	66
Multiple Key Access	67
Instant Key Release	68
User BIO Threshold	69

## EDIT USER

(NAME)

The user's name can easily be changed. To change a user's name, follow these steps:

- 1) Access the KeyWatcher and get to the **Edit User Menu** (See page 58) The following will be displayed:

↑	EDIT
↓	USER

- 2) Press **ENT**. The following will be displayed:

	EDIT USER
↓	NAME

- 3) Press **ENT**. The following will be displayed:

→	FIRST NAME
	LAST NAME

- 4) To select First Name or Last Name, use the up and down arrow keys to position the selection arrow so it points to the selection you want and press **ENT** to select it. The following will be displayed:

ENTER USER NUM
[xxxx]: _

- 5) Enter the number of the user that you want to edit the name selected for and press **ENT**. The following will be displayed:

FIRST NAME:
<u>USER0001</u>

- 6) Enter the User's Name using the alpha numeric keypad, then press **ENT**. The following will be displayed:

**Note:** If the first name was selected to be changed, the following will be displayed:

EDIT LAST
NAME?      Y/ <u>N</u>

- 7) Use the arrow keys to select 'Y' if you would like to edit this users last name or 'N' if you would not like to edit this users last name and press **ENT**. If 'Y' is selected, enter the User's Name using the alpha numeric keypad, then press **ENT**.

If 'N' is selected or when the Last Name is entered, one of the following will be displayed and the display will then return to step 3.

USER CHANGED
-----------------

or

USER NOT CHANGED
---------------------

## **EDIT USER**

### **(PIN)**

The user's PIN number can easily be changed. To change a user's PIN number, follow these steps:

- 1) Access the KeyWatcher and get to the **Edit User Menu** (See page 58) The following will be displayed:

↑	EDIT
↓	USER

- 2) Press **ENT**. The following will be displayed:

	EDIT
↓	USER NAME

- 3) Press the down arrow key until the following is displayed:

↑	EDIT USER
↓	PIN

- 4) Press **ENT**. The following will be displayed:

ENTER USER NUM
[xxxx]: _

- 5) Enter the number of the user that you want to edit the PIN for and press **ENT**. The following will be displayed:

ENTER NEW PIN
[xxxx]: _

- 6) Enter the new **PIN** number that you want for the user and press **ENT**. One of the following will be displayed and the display will return to step 4.

USER PIN CHANGED
---------------------

or

USER PIN NOT CHANGED
-------------------------



## EDIT USER

### (EMERGENCY RELEASE)

The emergency release function allows a user to remove all the keys from a box in the event of an emergency. This function allows the keys to be removed from the KeyWatcher quickly (See page 95 for more information on the emergency release function). To edit a users emergency release function, follow these steps:

- 1) Access the KeyWatcher and get to the **Edit User Menu** (See page 58). The following will be displayed:

↑	EDIT
↓	USER

- 2) Press **ENT**. The following will be displayed:

	EDIT
↓	USER NAME

- 3) Press the down arrow key until the following is displayed:

↑	EDIT USER
↓	EMERG RELEASE

- 4) Press **ENT**. the following will be displayed:

ENTER USER NUM
[xxxx]: _

- 5) Enter the number of the user that you want to edit the emergency release function for and press **ENT**. The following will be displayed:

EMERGENCY
RELEASE? <u>Y</u> /N

- 6) This display asks whether this user will be allowed to use the Emergency Release function. (see page 95 for more information on Emergency Release) The current emergency release usage for this user will have the cursor below it. Make a selection by using the left or right arrow keys to toggle between 'Y' and 'N'. You will see a cursor under the selected option. Press **ENT** to save your choice. The following will be displayed and the display will return to step 4.

USER
CHANGED

or

USER
NOT CHANGED

**Note:** If the emergency release function was changed , the display will say it was. If the emergency release function was not changed, the display will say it was not changed.

### IMPORTANT NOTE REGARDING EMERGENCY RELEASE

This function allows a user to remove all of the keys in the system in the event of an emergency regardless of access to keys.

**EDIT USER  
(CARD ACCESS)**

If your system supports a card reader, you may edit a users card access. Note: This will allow the programmer to change a users card.

To edit a users card access, follow these steps: (When the Card Reader is enabled, this menu item will also appear on the initial menu under Change Pin.)

- 1) Access the KeyWatcher and get to the **Edit User Menu** (See page 58). The following will be displayed:

↑	EDIT
↓	USER

- 2) Press **ENT**. The following will be displayed:

	EDIT
↓	USER NAME

- 3) Press the down arrow key until the following is displayed:

↑	EDIT USER
↓	CARD ACCESS

- 4) Press **ENT**. The following will be displayed:

ENTER USER NUM
[xxxx]: _

- 5) Enter the number of the user that you want to edit card access for and press **ENT**. The following will be displayed:

CARD ACCESS OFF CHANGE IT? <u>Y</u> /N	or	CARD ACCESS ON CHANGE IT? <u>Y</u> /N
---	----	--

- 6) Use the arrow keys to select 'Y' if you would like to change this users card access or 'N' if you would not like to change this users card access and press **ENT**. See the following chart for possibilities:

CARD ACCESS OFF CHANGE IT?		CARD ACCESS ON CHANGE IT?	
<b>YES</b>	The following will be displayed.	<b>YES</b>	User changed. Return to step 4.
<b>NO</b>	User not changed. Return to step 4.	<b>NO</b>	User not changed. Return to step 4.

SWIPE CARD THROUGH NOW
---------------------------

**Note:** If the user has lost their card, you will need to turn their card access off and then turn it back on to assign a new card.

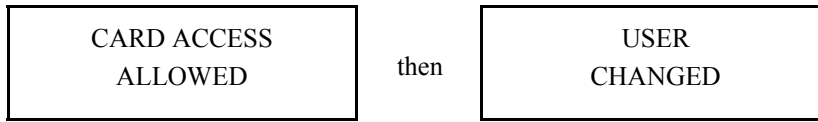
**Note:** If you have multiple KeyWatcher systems that will contain the same users, you should refer to the Enrollment Station feature on the Key-Pro III Software. This feature may be very useful.

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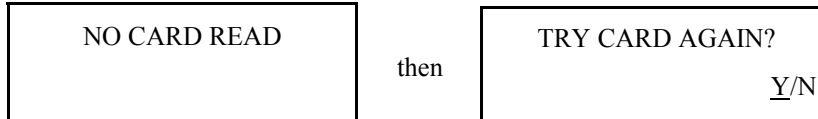
7) At this point a read should be initiated on the reader being used. One of the following will be displayed:

A) Card was accepted, continue with step 8.



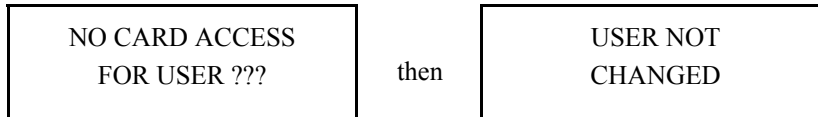
The display will then return to step 4.

B) Card was not read or is not being recognized by the reader. Try reading the card again. If the card still does not read, try a different card.

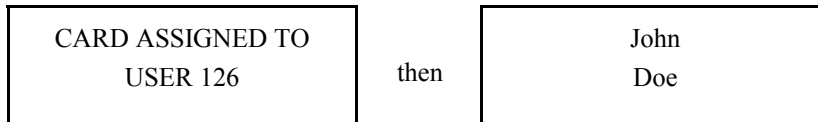


If 'Y' is selected above, the display will return to step 7 and allow you to try swiping a card.

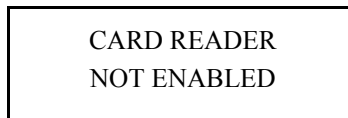
If 'N' is selected above, the following will be displayed and the display will then return to step 4.



**Note:** If a card is already assigned to another user, it cannot be assigned again. If an attempt is made to assign a card that is already assigned, the following will be displayed and the display will skip to step 7-B.



**Note:** If the following is displayed, your card reader is not enabled or your system does not support a card reader.



**EDIT USER  
(MENU ACCESS)**

Menu access determines what functions a user will be able to access when they enter the system. To edit a users menu access level, follow these steps:

- 1) Access the KeyWatcher and get to the **Edit User Menu** (See page 58). The following will be displayed:

↑	EDIT
↓	USER

- 2) Press **ENT**. The following will be displayed:

	EDIT
↓	USER NAME

- 3) Press the down arrow key until the following is displayed:

↑	EDIT USER
↓	MENU ACCESS

- 4) Press **ENT**. The following will be displayed:

ENTER USER NUM
[xxxx]: _

- 5) Enter the number of the user that you want to edit menu access for and press **ENT**. The following will be displayed:

LEVEL IS NOW	?
LEVEL [1-5] :	_

- 6) The current access level for this user is shown on the top row of the display. Enter the new access level and press **ENT**. The following will be displayed and the display will then return to step 4.

USER CHANGED	or	USER NOT CHANGED
-----------------	----	---------------------

**Note:** The new access level for this user will take effect immediately.

USER ACCESS LEVELS	
<b>ALL ACCESS LEVELS HAVE THE ABILITY TO REMOVE &amp; RETURN KEYS AND GROUPS.</b>	
<b>LEVEL 1:</b>	Provides the user with complete access to <b>ALL FUNCTIONS. (Programmer)</b>
<b>LEVEL 2:</b>	Allows the user to <b>CHANGE PIN</b> . Also allows access to <b>ENROLL</b> and <b>DELETE</b> level 2 thru LEVEL 5 user cards or fingerprints, <b>GENERATE REPORTS</b> and <b>ALARMS</b> .
<b>LEVEL 3:</b>	Allows the user to <b>CHANGE PIN</b> .
<b>LEVEL 4:</b>	No additional functions.
<b>LEVEL 5:</b>	Allows the user access to <b>GENERATE REPORTS</b> and <b>ALARMS</b> .

**Note:** The change pin function only allows the user to change their own pin number. See page 100.

## EDIT USER

### (DEPARTMENT ID (OPTIONAL))

This option works in conjunction with the “Dual, or Triple User Key” features. When a Dual or Triple User Key is requested by a level 2-5 user, the KeyWatcher will require the second and/or third user (level 1-5) to be assigned to different departments. This feature may be enabled or disabled. If this feature is enabled and the second and/or third user is assigned to the same department as any of the other users requesting the key, that code will be considered an Invalid User Code. There are 16 departments that can be assigned. Be sure when programming your users that the correct departments are assigned. To set the department access key removal, see page 30. To edit a users department ID, follow these steps:

- 1) Access the KeyWatcher and get to the **Edit User Menu** (See page 58). The following will be displayed:

↑	EDIT
↓	USER

- 2) Press **ENT**. The following will be displayed:

	EDIT
↓	USER NAME

- 3) Press the down arrow key until the following is displayed:

↑	EDIT USER
↓	DEPT ID

- 4) Press **ENT**. The following will be displayed:

ENTER USER NUM
[xxxx]: _

- 5) Enter the number of the user that you want to edit menu access for and press **ENT**. The following will be displayed:

DEPT ID IS	?
DEPT [0-15]:	_

- 6) The department ID for this user is shown on the top row of the display. Enter the new department ID and press **ENT**. The following will be displayed and the display will then return to step 4.

USER CHANGED	or	USER NOT CHANGED
-----------------	----	---------------------

**Note:** The new department ID for this user will take effect immediately.

## EDIT USER (RESTRICTED KEYS)

Restricted keys determines whether or not a user may access all keys or just specific keys. If a user has restricted keys, that user will not have access to keys until they have been assigned restrictions. To edit a users restricted keys function, follow these steps:

- 1) Access the KeyWatcher and get to the **Edit User Menu** (See page 58). The following will be displayed:

↑        EDIT  
↓        USER

- 2) Press **ENT**. The following will be displayed:

EDIT  
↓        USER NAME

- 3) Press the down arrow key until the following is displayed:

↑        EDIT USER  
↓        RESTRICTED KEYS

- 4) Press **ENT**. The following will be displayed:

ENTER USER NUM  
[xxxx]: \_

- 5) Enter the number of the user that you want to edit menu access for and press **ENT**. The following will be displayed:

RESTRICTED  
KEYS?        Y/N

- 6) This display asks whether this user will have restricted keys or not. If “Y” is selected this user **WILL NOT** have access to any keys until the programmer restricts keys.

If “N” is selected this user **WILL** have full access to all current and future keys that are added to the system. After you enter your selection the following will be displayed and the display will then return to step 4.

USER  
CHANGED

or

USER  
NOT CHANGED

## EDIT USER

### (MULTIPLE KEY ACCESS)

The multiple key access function allows the user to remove multiple keys from the system provided they have proper access. If the user does not have multiple key access they will only be allowed to have one key out of the system at any given time. To edit a users Multiple Key Access, follow these steps:

- 1) Access the KeyWatcher and get to the **Edit User Menu** (See page 58). The following will be displayed:

```
↑      EDIT
↓      USER
```

- 2) Press **ENT**. The following will be displayed:

```
      EDIT
↓     USER NAME
```

- 3) Press the down arrow key until the following is displayed:

```
↑      EDIT USER
      MULTIKEY ACCESS
```

- 4) Press **ENT**. The following will be displayed:

```
ENTER USER NUM
[xxxx]: _
```

- 5) Enter the number of the user that you want to edit multiple key access for and press **ENT**. The following will be displayed:

```
MULTI-KEY ACC
                        Y/N
```

- 6) If you would like this user to have multiple key access, select 'Y' and press **ENT**. You will then be prompted to enter the number of keys the user can have out at any given time may be set from 0-15 (0 being ALL). If you do not want this user to have multiple key access, select 'N' (single key only) and press **ENT**. The following will be displayed and the display will return to step 4.

```
      USER
      CHANGED
```

or

```
      USER
      NOT CHANGED
```

## EDIT USER

### (INSTANT KEY RELEASE)

The instant key release function allows the system to release and return keys automatically when a user with menu access level 3 or 4 enters their ID-PIN Number followed by a “1” or a user initiates a Card Read. To edit a users Instant Key Release, follow these steps:

- 1) Access the KeyWatcher and get to the **Edit User Menu** (See page 58). The following will be displayed:

↑	EDIT
↓	USER

- 2) Press **ENT**. The following will be displayed:

	EDIT
↓	USER NAME

- 3) Press the down arrow key until the following is displayed:

↑	EDIT USER
	INSTANT KEY REL

- 4) Press **ENT**. The following will be displayed:

ENTER USER NUM
[xxxx]: _

- 5) Enter the number of the user that you want to edit multiple key access for and press **ENT**. The following will be displayed:

INSTANT KEY REL
<u>Y</u> /N

- 6) This display asks whether this user will have instant key release or not. If you would like this user to have instant key release, select ‘Y’ and press **ENT**. If you do not want this user to have instant key release, select ‘N’ and press **ENT**. The following will be displayed and the display will return to step 4.

USER CHANGED	or	USER NOT CHANGED
-----------------	----	---------------------

**Note:** This function will not operate with menu access levels 1, 2, and 5 because these access levels perform menu functions other than removing and returning keys. If an attempt to edit a user with these access level is made, the following will be displayed:

INSTANT KEY CHANGE NOT ALLOWED
-----------------------------------



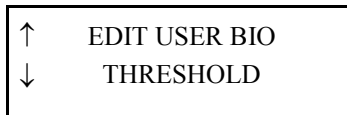
**EDIT USER  
(BIO THRESHOLD)**

This feature operates in conjunction with the Bioscrypt reader (sold separately). This allows the threshold (sensitivity) of the Fingerprint reads to be adjusted for an individual user. To modify the BIO Global Threshold, follow these steps:

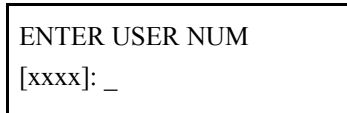
- 1) Access the KeyWatcher and get to the **Edit User Menu** (See page 58). The following will be displayed:



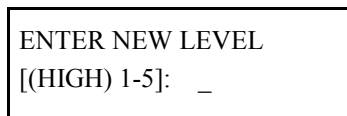
- 2) Press the down arrow key until the following is displayed:



- 3) Press **ENT**. The following will be displayed:



- 4) Enter the number of the user that you want to edit the Bio Threshold for and press **ENT**. The following will be displayed:



- 5) The highest and most secure setting is 1 but is also the most sensitive setting. Keep in mind that the higher the setting the more incorrect reads user's may get from the fingerprint reader. Enter a Threshold level between 1-5 and press **ENT**. The following will be displayed:



**Note:** Keep in mind that there are two threshold settings for Biometric Fingerprint reader. The first is the Global Threshold and the second is the User Threshold. The system will always use the Lower value of the two settings. For instance, if you have a Global setting of 3 and a user setting of 1, the fingerprint reader will use a threshold of 3 for this user.

The fingerprint reader is intended to keep the global threshold set to a higher value and modify a user's individual threshold lower.

**Note:** If no templates are found for the user, a message will be displayed indicating NO TEMPLATES FOUND and the display will return to step 3. In order to change the threshold setting for an individual user, the user must have templates added.

## EDIT USER RESTRICTION

(ON KEYS)

Allows the programmer to change the time zone and/or the days of the week for a key restriction. To edit a user key restriction, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
ADD
↓
```

- 2) Press the down arrow key until the following is displayed:

```
↑ EDIT
↓
```

- 3) Press **ENT**. The following will be displayed:

```
EDIT
↓ KEY
```

- 4) Press the down arrow key until the following is displayed:

```
↑ EDIT USER
↓ RESTRICTION
```

- 5) Press **ENT**. The following will be displayed:

```
RESTRICT
↓ KEY
```

- 6) Press **ENT**. The following will be displayed:

```
ENTER USER NUM
[xxxx]: _
```

- 7) Enter the number of the user that you want to edit key restrictions for and Press **ENT**. The following will be displayed:

```
ENTER KEY NUMBER
[1-2000]: _
```

- 8) Enter the number of the key restriction that you want to change the time zone and/or the days of the week that this user will be able to access and press **ENT**. The following will be displayed:

```
SELECT TIME
ZONE?   Y/N
```

- 9) If 'Y' is selected, the top of the next page will be displayed. If 'N' is selected, the user will be able to access the key at any time and the display will then skip to step 10.

WHICH TIME ZONE  
[1-99]: \_

- 9) Enter the number of the time zone that will define what times this user can have access to this key and press **ENT**. If the time zone number is not found the display will return to step 9. The following will be displayed if the time zone is valid.

DAYS OF WEEK  
SMTWTFS

- 10) The days of the week that have capital letters are the days that this user **WILL** have access to this key and the days of the week that have small letters are the days that this user **WILL NOT** have access to this key . To change the day of the week from capital to small letters, place the cursor under the letter and press **CLR**. The following will be displayed:

RESTRICTION CHANGED      or      RESTRICTION NOT CHANGED

then

MORE KEYS?  
Y/N

- 11) If you would like to edit more key restrictions for this user, use the arrow keys to select ‘Y’ for yes and press **ENT**. The display will return to step 6 and allow the user to restrict another key. If you do not want to edit more key restrictions for this user, select ‘N’ for no and press **ENT**. The display will return to step 4.

**Note:** You must have a restriction before a restriction can be edited. If a key restriction that does not exist is chosen, the following will be displayed:

RESTRICTION  
DOES NOT EXIST

## EDIT USER RESTRICTION (ON GROUPS)

Allows the programmer to change the time zone and/or the days of the week for a group restriction. To edit a user group restriction, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
ADD
↓
```

- 2) Press the down arrow key until the following is displayed:

```
↑ EDIT
↓
```

- 3) Press **ENT**. The following will be displayed:

```
EDIT
↓ KEY
```

- 4) Press the down arrow key until the following is displayed:

```
↑ EDIT USER
↓ RESTRICTION
```

- 5) Press **ENT**. The following will be displayed:

```
RESTRICT
↓ KEY
```

- 6) Press the down arrow key until the following is displayed:

```
↑ RESTRICT
GROUPS
```

- 7) Press **ENT**. The following will be displayed:

```
ENTER USER NUM
[xxxx]: _
```

- 8) Enter the number of the user that you want to edit key restrictions for and Press **ENT**. The following will be displayed:

```
ENTER GROUP NUM
[1-250]: _
```

- 9) Enter the number of the group restriction that you want to change the time zone and/or the days of the week that this user will be able to access and press **ENT**. The top of the next page will be displayed:

SELECT TIME  
ZONE? Y/N

- 10) If 'Y' is selected, the following will be displayed. If 'N' is selected, the user will be able to access the key at any time and the display will then skip to step 11.

WHICH TIME ZONE  
[1-99]: \_

- 11) Enter the number of the time zone that will define what times this user can have access to this keys in this group and press **ENT**. If the time zone number is not found the display will return to step 10. The following will be displayed if the time zone is valid.

DAYS OF WEEK  
SMTWTFS

- 12) The days of the week that have capital letters are the days that this user **WILL** have access to this key and the days of the week that have small letters are the days that this user **WILL NOT** have access to this key . To change the day of the week from capital to small letters, place the cursor under the letter and press **CLR**. The following will be displayed:

RESTRICTION CHANGED      or      RESTRICTION NOT CHANGED

then

MORE GROUPS?  
Y/N

- 13) If you would like to edit more group restrictions for this user, use the arrow keys to select 'Y' for yes and press **ENT**. The display will return to step 9 and allow the user to restrict another key. If you do not want to edit more key restrictions for this user, select 'N' for no and press **ENT**. The display will return to step 7.

**Note:** You must have a group restriction before a group restriction can be edited. If a group restriction that does not exist is chosen, the following will be displayed:

RESTRICTION  
DOES NOT EXIST

## **EDIT TIME ZONE (NAME)**

Allows the programmer to change the name of the time zone. To edit a time zones name, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

ADD  
↓

- 2) Press the down arrow key until the following is displayed:

↑      EDIT  
↓

- 3) Press **ENT**. The following will be displayed:

EDIT  
↓      KEY

- 4) Press the down arrow key until the following is displayed:

↑      EDIT  
         TIME ZONE

- 5) Press **ENT**. The following will be displayed:

EDIT  
↓      TIME ZONE NAME

- 6) Press **ENT**. The following will be displayed:

ENTER TZ NUM  
[1-99]: \_

- 7) Enter the number of the time zone that you want to change the name for and press **ENT**. The following will be displayed:

TIME ZONE NAME:  
ZONE01

- 8) Enter the Time Zone Name using the alpha numeric keypad, then press **ENT**. The following will be displayed and the display will return to step 6.

TIME ZONE NAME  
CHANGED

or

TIME ZONE NAME  
NOT CHANGED

**Note:** If a time zone that does not exist is chosen, TIME ZONE NOT FOUND will be displayed:

## EDIT TIME ZONE (TIMES)

Allows the programmer to change the times for a time zone. Keep in mind that when a time zones time is changed and that time zone is being used to restrict keys or groups, the restrictions will also change. Example: If user 1154 has key 54 restricted with time zone number 1 (08:00 to 17:00) and you edit that time zone and change it to 10:00 to 17:00, that users time zone for key 54 will change to 10:00 to 17:00. To edit a time zones time, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

ADD
↓

- 2) Press the down arrow key until the following is displayed:

↑	EDIT
↓	

- 3) Press **ENT**. The following will be displayed:

	EDIT
↓	KEY

- 4) Press the down arrow key until the following is displayed:

↑	EDIT
	TIME ZONE

- 5) Press **ENT**. The following will be displayed:

	EDIT
↓	TIME ZONE NAME

- 6) Press the down arrow key until the following is displayed:

↑	EDIT
	TIME ZONE TIMES

- 7) Press **ENT**. The following will be displayed:

WHICH TIME ZONE
[1-99]: _

- 8) Enter the number of the time zone that you want to change the times for and press **ENT**.  
If the time zone number entered is a Specific Time Zone, skip to step 8-A.  
If the time zone number entered is a Duration Time Zone, skip to step 8-B.

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A) If time zone number selected at step 8 was a Specific Time Zone, the following will be displayed:

ENTER START TIME  
[HH:MM]:        \_ :

Enter the time (24 hour format) that the time zone will begin and press **ENT**. The following will be displayed:

**Note:** The start time is when the user will be able to remove the key and the end time is when the user must have the key returned by. The maximum start or end time is 23:59 and the time between the start and end time must be at least one minute.

ENTER END TIME  
[HH:MM]:        \_ :

Enter the time (24 hour format) that the time zone will end and press **ENT**. The display will then skip to step 9.

B) If time zone number selected at step 8 was a Duration Time Zone, the following will be displayed:

ENTER DURATION  
[HH:MM]:        \_ :

Enter the duration time (24 hour format) that the key will be allowed out and press **ENT**. The display will then skip to step 9.

**Note:** There is only one time that needs to be entered for the duration time zone. The maximum duration time is 23:59 and the minimum duration time is 00:02.

9) The following will be displayed after the time zone has been changed and the display will return to step 7.

TIME ZONE TIMES  
CHANGED

**Note:** If a time zone that does not exist is chosen, TIME ZONE NOT FOUND will be displayed:



## DELETING PROGRAMMED INFORMATION

This section explains how to delete the information programmed into the KeyWatcher. You may delete keys, groups, users, user restrictions and time zones.

### DELETE KEY

If you want to delete a key and add another in its place, with all the same restrictions, see the section on **replacing a key** (page 117). If a key is deleted and then added back to the system, any user with restricted keys “YES” will not have access until the programmer adds user restrictions (gives access to). To delete a key from the system, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

ADD  
↓

- 2) Press the down arrow key until the following is displayed:

↑      DELETE  
↓

- 3) Press **ENT**. The following will be displayed:

DELETE  
↓      KEY

- 4) Press **ENT**. The following will be displayed:

ENTER KEY NUMBER  
[1-2000]: \_

- 5) Enter the number of the key you wish to delete and press **ENT**. The following will be displayed:

KEY  
DELETED

**Note:** If the key number entered is a number of a key that is still in the KeyWatcher, you will be prompted to remove the key.

**Note:** If a key number that does not exist is entered, KEY NOT FOUND will be displayed:

## DELETE GROUP

When deleting a group, keep in mind that any user who was given access to that group will no longer be able to access those keys after the group is deleted. To delete a group of restricted keys so that a specific user cannot access them any longer, see the section on **Deleting User Restrictions (Groups)** (page 82). To delete a group from the system, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

ADD
↓

- 2) Press the down arrow key until the following is displayed:

↑      DELETE
↓

- 3) Press **ENT**. The following will be displayed:

DELETE
↓      KEY

- 4) Press the down arrow key until the following is displayed:

↑      DELETE
↓      GROUP

- 5) Press **ENT**. The following will be displayed:

ENTER GROUP NUM
[1-250]: _

- 6) Enter the number of the group you wish to delete and press **ENT**. The following will be displayed:

GROUP
DELETED

**Note:** If a group number that does not exist is entered, GROUP NOT FOUND will be displayed:

## DELETE USER

To delete a user from the system, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
ADD
↓
```

- 2) Press the down arrow until the following is displayed:

```
↑ DELETE
↓
```

- 3) Press **ENT**. The following will be displayed:

```
DELETE
↓ KEY
```

- 4) Press the down arrow key until the following is displayed:

```
↑ DELETE
↓ USER
```

- 5) Press **ENT**. The following will be displayed.

```
ENTER USER NUM
[xxxx]: _
```

- 6) Enter the user number you wish to delete and press **ENT**. The following will be displayed:

```
USER
DELETED
```

**Note:** If the user cannot be deleted, the following messages will be displayed describing why.

```
USER
NOT FOUND
```

**A USER THAT DOES NOT  
EXIST CANNOT BE  
DELETED.**

```
CANNOT DELETE
ACTIVE USER
```

**A USER CANNOT DELETE  
THEIR OWN CODE.**

```
USER
HAS KEYS OUT
```

**A USER THAT HAS KEYS  
OUT OF THE SYSTEM  
CANNOT BE DELETED.**

## DELETE USER RESTRICTION

(KEY)

This function allows the programmer to delete user/key restrictions. **Example:** If user number 1111 has a key restriction for key 2, then that user **is** allowed to have that key. If you would not like that user to have access to key 2 any longer, you would delete his restriction for key 2. To delete a user/key restriction, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
      ADD
      ↓
```

- 2) Press the down arrow until the following is displayed:

```
      ↑  DELETE
      ↓
```

- 3) Press **ENT**. The following will be displayed:

```
      DELETE
      KEY
      ↓
```

- 4) Press the down arrow until the following is displayed:

```
      ↑  DELETE USER
      ↓  RESTRICTIONS
```

- 5) Press **ENT**. The following will be displayed:

```
      USER/KEY
      ↓  RESTRICTION
```

- 6) Press **ENT**. The following will be displayed:

```
ENTER USER NUM
[xxxx]: _
```

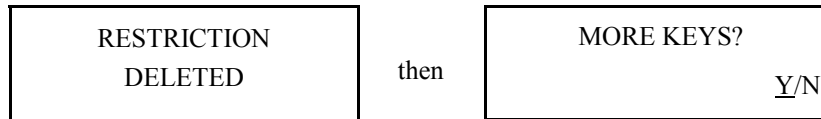
- 7) Type in the number of the user you wish to delete a user/key restriction from and press **ENT**. The following will be displayed:

```
ENTER KEY NUMBER
[1-2000]: _
```

- 8) Type in the number of the key that you do not want this user to have access to any longer and press **ENT**. The top of the next page will be displayed:

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- 9) If you would like to delete more user restrictions for this user, use the arrow keys to select 'Y' for yes and press **ENT**. The display will return to step 8 and allow the user to delete more user restrictions for this user. If you would not like to delete more user restrictions for this user, select 'N' for no and press **ENT**. The display will return to step 6:

**Note:** If a key number that does not exist is entered, KEY NOT FOUND will be displayed:

**Note:** If a key that is not restricted to this user is entered, RESTRICTION DOES NOT EXIST will be displayed:

**Note:** If a user number that does not exist is entered, USER NOT FOUND will be displayed:

## DELETE USER RESTRICTION (GROUP)

This function allows the programmer to delete user/group restrictions. **Example:** If user number 1111 has group 2 restricted, then that user is allowed access to the keys in that group. If you would not like that user to have access to group 2 keys, you would delete the group restriction and that user will not be able to access those keys at all. To delete a user/group restrictions, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

```
ADD
↓
```

- 2) Press the down arrow until the following is displayed:

```
↑ DELETE
↓
```

- 3) Press **ENT**. The following will be displayed:

```
DELETE
↓ KEY
```

- 4) Press the down arrow until the following is displayed:

```
↑ DELETE USER
↓ RESTRICTIONS
```

- 5) Press **ENT**. The following will be displayed:

```
USER/KEY
↓ RESTRICTION
```

- 6) Press the down arrow until the following is displayed:

```
↑ USER/GROUP
↓ RESTRICTION
```

- 7) Press **ENT**. The following will be displayed:

```
ENTER USER NUM
[xxxx]: _
```

- 8) Type in the number of the user you wish to delete a user/group restriction from and press **ENT**. The top of the next page will be displayed:

ENTER GROUP NUM  
[1-250]: \_

- 9) Type in the number of the group that you do not want this user to have access to any longer and press **ENT**. The following will be displayed:

RESTRICTION  
DELETED

then

MORE GROUPS?  
Y/N

- 10) If you would like to delete more groups of restrictions for this user, use the arrow keys to select 'Y' for yes and press **ENT**. The display will return to step 9 and allow the user to delete more user restrictions for this user.

If you would not like to delete more groups of restrictions for this user, select 'N' for no and press **ENT**. The following will be displayed:

MORE USERS?  
Y/N

- 11) If you would like to delete more user restrictions for a different user, use the arrow keys to select 'Y' for yes and press **ENT**. The display will return to step 8 and allow the user to enter another user number to delete user restrictions. If you would not like to delete more user restrictions for any user, select 'N' for no and press **ENT**. The display will return to step 7.

**Note:** If no keys in that group are restricted to this user or the key does not exist, the following will be displayed:

RESTRICTION  
DOES NOT EXIST

**Note:** If a user number that does not exist is entered, the following will be displayed:

USER  
NOT FOUND

**Note:** If a group number that does not exist is entered, the following will be displayed:

GROUP  
NOT FOUND

## DELETE TIME ZONE

To delete a time zone follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

ADD  
↓

- 2) Press the down arrow until the following is displayed:

↑ DELETE  
↓

- 3) Press **ENT**. The following will be displayed:

DELETE  
↓ KEY

- 4) Press the down arrow until the following is displayed:

↑ DELETE  
TIME ZONE

- 5) Press **ENT**. The following will be displayed:

WHICH TIME ZONE  
[1-99]: \_

- 6) Press **ENT**. The following will be displayed and the display will then return to step 5.

TIME ZONE  
DELETED

**Note:** If a time zone number that does not exist is entered, the following will be displayed and the display will then automatically return to step 5.

TIME ZONE  
NOT FOUND

**Note:** If a time zone number that is in use (assigned to a key or group restriction) is entered, the following will be displayed. A time zone in use cannot be deleted.

TIME ZONE  
NOT DELETED



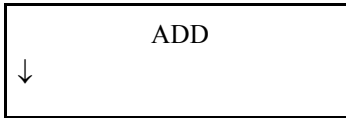
## PRINTING PROGRAMMED INFORMATION

This section explains how to print the information that is programmed into the KeyWatcher. The system allows you to print a list of keys, users, groups, and time zones. The information can be printed directly to a serial printer connected directly to the KeyWatcher. If you want to print this information using a computer, see your Key-Pro *III* User Manual.

### PRINT LIST OF KEYS

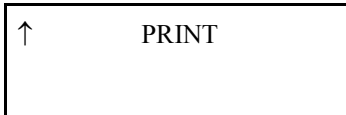
See page 144 for a sample list of keys report. To print a list of keys, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:



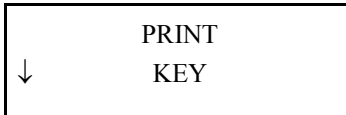
A rectangular box containing the word "ADD" centered at the top. Below it is a downward-pointing arrow.

- 2) Press the down arrow key until the following is displayed:



A rectangular box containing an upward-pointing arrow on the left and the word "PRINT" centered to its right.

- 3) Press **ENT**. The following will be displayed:



A rectangular box containing a downward-pointing arrow on the left and the words "PRINT" and "KEY" stacked vertically to its right.

- 4) Press **ENT**. The following will be displayed and the report will begin to print.



A rectangular box containing the words "REPORT" and "QUEUED" stacked vertically in the center.

**Note:** If the printer is not ON-LINE or the printer is out of paper or the cable is not connected from the KeyWatcher to the printer or the wrong cable is connected from the KeyWatcher to the printer, the following will be displayed:



A rectangular box containing the words "NO REPORT" and "CHECK PRINTER" stacked vertically in the center.

## PRINT LIST OF GROUPS

See page 145 for a sample group list report. To print a list of groups, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

ADD
↓

- 2) Press the down arrow key until the following is displayed:

↑	PRINT
---	-------

- 3) Press **ENT**. The following will be displayed:

↓	PRINT KEY
---	--------------

- 4) Press the down arrow key until the following is displayed:

↑	PRINT
↓	GROUP

- 5) Press **ENT**. The following will be displayed and the report will begin to print.

REPORT QUEUED
------------------

**Note:** If the printer is not ON-LINE or the printer is out of paper or the cable is not connected from the KeyWatcher to the printer or the wrong cable is connected from the KeyWatcher to the printer, the following will be displayed:

NO REPORT CHECK PRINTER
----------------------------

## PRINT LIST OF USERS

See page 146 for a sample user list (full) report and page 147 for a sample list of users (partial) report. To print a list of users, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

ADD ↓
----------

- 2) Press the down arrow key until the following is displayed:

↑      PRINT
--------------

- 3) Press **ENT**. The following will be displayed:

PRINT ↓      KEY
---------------------

- 4) Press the down arrow key until the following is displayed:

↑      PRINT ↓      USER
-----------------------------

- 5) Press **ENT**. The following will be displayed:

FULL ↓      USER
---------------------

- 6) Here you will need to choose which type of user report to print. If you would like the full user report, which gives you a full report on one or all users, press **ENT**. The following will be displayed. If you would like a partial user report press the down arrow key and proceed to step 11.

FOR ALL USERS?  Y/N
---------------------------

- 7) Use the arrow keys to decide if you would like a full user report for **ALL** users or for an individual user. If you would like a full user report on **All** users select 'Y' and press **ENT**. If you would like a full user report on one user select 'N' and press **ENT**, then Proceed to step 9.

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- 8) If you are sure that you would like a full user report on **ALL** users (at least one page for each user) select 'Y' and press **ENT**. The report will begin printing and the following will be displayed. If you do not want a full user report select 'N' and press **ENT**. The display will then return to step 5.

REPORT  
QUEUED

- 9) If 'N' is selected at step 7, the following will be displayed:

ENTER USER NUM  
[xxxx]: \_

- 10) Enter the users number you wish to print and press **ENT**. The following will be displayed and the report will begin to print. The display will then return to step 5.

REPORT  
QUEUED

- 11) If you would like a partial user report, which will give you a condensed list of all the users, press the down arrow key until the following is displayed instead of **ENT** at the full user display (step 6). The following will be displayed.

↑ PARTIAL  
USER

- 12) Press **ENT**. The following will be displayed and the report will begin to print.

REPORT  
QUEUED

**Note:** If a user number that does not exist is chosen, the following will be displayed:

ILLEGAL  
USER NUMBER

**Note:** If the printer is not ON-LINE or the printer is out of paper or the cable is not connected from the KeyWatcher to the printer or the wrong cable is connected from the KeyWatcher to the printer, the following will be displayed:

NO REPORT  
CHECK PRINTER

## PRINT LIST OF TIME ZONES

See page 148 for a sample time zones list report. To print a time zones list, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Database**. The following will be displayed:

↓ ADD
----------

- 2) Press the down arrow key until the following is displayed:

↑ PRINT
------------

- 3) Press **ENT**. The following will be displayed:

↓ PRINT KEY
-------------------

- 4) Press the down arrow key until the following is displayed:

↑ PRINT TIME ZONES
--------------------------

- 5) Press **ENT**. The following will be displayed and the report will begin to print.

REPORT QUEUED
------------------

**Note:** If the printer is not ON-LINE or the printer is out of paper or the cable is not connected from the KeyWatcher to the printer or the wrong cable is connected from the KeyWatcher to the printer, the following will be displayed:

NO REPORT CHECK PRINTER
----------------------------

## **LOGGING OFF**

When a valid user code is entered and the user accesses the Main Menu, the KeyWatcher is not able to be accessed to remove keys. When the user is finished accessing the menus, a proper log off procedure should be followed to insure the operation of the KeyWatcher without any delays.

If the KeyWatcher is left at the Main Menu prompt without being used, the KeyWatcher will remain in this state for approximately 1 minute. To log off without delay, press the **CLR** key while at the Main Menu. This will exit to the title screen and properly log off.

**NOTE: FOR SECURITY REASONS, YOU SHOULD NEVER WALK AWAY FROM THE KEYWATCHER WHILE IT IS AT THE MAIN MENU OR THE REMOVE/RETURN KEYS DISPLAY. THIS WILL ENABLE UNAUTHORIZED PERSONNEL TO REMOVE KEYS OR CHANGE THE PROGRAMMING IN THE SYSTEM.**

# SECTION

## III

### REMOVAL & RETURN OF KEYS

# REMOVAL/RETURN OF KEYS

This section explains the various methods of removing and returning keys. Any user with a valid user code may remove keys (provided they have access to the key) or return keys.

## KEY REMOVAL

To remove a key (or keys) from the KeyWatcher, follow these steps:

- 1) Press any key on the keypad to activate the system. The following will be displayed:

ENTER ID - PIN  
- - - - - - - - - -

- 2) Enter your assigned 4-digit user ID number, followed by your 4-digit PIN, and press **ENT**. The following will be displayed:

REMOVE  
↓  
KEYS

- 3) Press **ENT**. The display will show:

REMOVE KEYS  
-

- 4) Enter the numbers of the keys you wish to remove, separated by **ENT**. Press **ENT** a second time when you are finished entering all the key numbers you wish to remove. For example, if you wish to remove keys 2, 3, 7, and 12, you would press **2 ENT 3 ENT 7 ENT 12 ENT ENT**. If you wish to remove key 1 only, you would press **1 ENT ENT**.

If you are allowed access to the keys entered, the KeyWatcher will prompt you to open the door, then begin releasing the keys 1 at a time. Each key location will remain released for 10 seconds. If the key is not removed within 10 seconds, the location will lock and the next key will be released. When the last key is removed the display will prompt you to close the door.

### IMPORTANT INFORMATION WHEN REMOVING KEYS

If an attempt is made to remove a key that you do not have access, a message will display **ACCESS DENIED**.

If the key requested is already in use, a message will be display **KEY OUT WITH** and the user to which it is out.

If a key number that does not exist is entered, a message will be displayed indicating **KEY NOT FOUND**.

If your system contains the optional **NO DOOR** feature, disregard any mention for opening and closing the door.

If you are using the remove by name **KEY REMOVE METHOD**, an alpha numeric key name will need to be entered in place of the key number in order to remove keys. See page 23 for more information pertaining to Key Remove Method.



## **KEY REMOVAL**

### **(DUAL / TRIPLE USER KEYS - OPTIONAL)**

The following describes the Dual & Triple User Key Access features.

A Dual / Triple User Key requires either a level 1 user or two / three users with access levels 2-5 and access to the key in order for it to be released. This can be done by combinations of card access & PIN, all PIN, or all card access.

The following explains the possibilities when removing Dual / Triple User Keys.

- 1) Access level 1: User requesting either a Dual or Triple User Key that they have access to, the key will be released as normal. No Dual or Triple User required.
- 2) Access level 2-5: User requesting either a Dual or Triple User Key that they have access to, the system will prompt for a second user to enter their ID-PIN number and if it is a Triple User Key the system will prompt for a third ID-PIN number. The second and third users are required to have access to the key, however the time restriction will not make any difference.
- 3) If an attempt is made to remove a key that you are not allowed access to, the system will display ACCESS DENIED.

### **(DEPARTMENTAL ACCESS - OPTIONAL)**

If this feature is enabled (page 30) when a Dual or Triple User Key is requested, the KeyWatcher will require users to be from a different department. If the user is assigned to the same department as any of the other users requesting the key, that code will be considered an Invalid User Code. (See page 30 For more information on the Departmental Access)

## **KEY REMOVAL / RETURN**

### **(INSTANT KEY)**

If this feature is enabled the system will release or return keys automatically when a user enters their ID-PIN Number followed by a "1" or initiates a read with a Card Reader. This feature will ONLY operate with the users 100 lowest number keys. If the user has additional restrictions, they are disregarded by the instant key feature.

The following explains the possibilities when removing / returning a key with the Instant Key feature enabled.

- 1) Users with access levels 1, 2, & 5 will access the system as normal, no instant key will be initiated. This is because users with these access levels will be performing functions such as programming, generating reports, and canceling alarms.
- 2) Users with access levels 3 & 4 will either enter their ID-PIN Number followed by a "1" or initiate a read with a Card Reader. One of the situations will occur:
  - A) If all the keys the user has access to are in the system, the KeyWatcher will automatically begin releasing keys to which the user has access.
  - B) If the user has already removed all the keys to which they have access, the KeyWatcher will prompt the user to return keys.
  - C) If the user has some keys out and others in the system, the user will be asked to select REMOVE or RETURN. If the user wants to remove keys, place the cursor to point at REMOVE KEYS and press ENT. If the user would like to return keys, place the cursor to point at RETURN KEYS and press ENT.

**Note:** If the user would like to skip a key being released and go to the next key, press CLR.

## GROUP REMOVAL

Any user with a valid user code may remove groups of keys, provided they have access to the keys in the group. There are 2 types of group removals. The first is All keys, which will release each key in the group one at a time. The second type of group removal is the Next available key, which will release only the next available key in the group. The KeyWatcher defaults to “All Keys Will Release”. (For more information on “Group Release Type” see page 22)

To remove a group from the KeyWatcher, follow these steps:

- 1) Press any key on the keypad to activate the system. The following will be displayed:

ENTER ID - PIN  
- - - - - - - - - -

- 2) Enter your assigned 4-digit user ID number, followed by your 4-digit PIN, and press **ENT**. The following will be displayed:

REMOVE  
↓  
KEYS

- 3) Press the down arrow until the following is displayed:

↑ REMOVE  
↓ GROUPS

- 4) Press **ENT**. The following will be displayed:

ENTER GROUP NUM  
[1-250]: \_

- 5) Enter the group number you wish to remove and press **ENT**. Depending on the type of group removal you are using, one of the two following instances will occur.

### Release All Keys

The KeyWatcher will prompt you to open the door and then begin releasing each key one at a time. Each location will remain released for 8 seconds. If a key is not removed within 8 seconds, the location will lock and the next key will be released. When the last key is removed the KeyWatcher will prompt you to close the door. If a key cannot be released, a message (similar to the messages for removing keys) will be displayed and the KeyWatcher will then continue to the next key in the group.

### Release Next Available Key

The KeyWatcher will prompt you to open the door and then release **ONLY** the next key in succession for that group. This is useful in situations where multiple smartkeys are added to the system with the same keys attached.

**Note:** If a group number that does not exist is entered, the following will be displayed and the display will then automatically return to the title screen.

GROUP  
NOT FOUND

## EMERGENCY RELEASE

In the event of an emergency that requires all keys to be removed from the KeyWatcher, there is a function that allows for quick removal of all keys. Only users authorized with the Emergency Release feature may perform this function. To edit a users Emergency Release function, see page 61.

To remove all keys via Emergency Release, perform the following steps:

- 1) Press any key on the keypad to activate the system. The following will be displayed:

ENTER ID - PIN  
----- - -----

- 2) Enter your 4-digit user ID number, followed by your 4-digit PIN, followed by the number 9, and press **ENT**. For example, if your user code is 1520, and your PIN is 4585, you would press **1520-45859 ENT**. The following will be displayed. (If your system has only one box, skip to step 4)

WHICH BOX  
[1-15]: \_

- 3) Enter the number of the box you wish to perform an emergency release to and press **ENT**. The following will be displayed.

OPEN DOOR  
BOX ??

- 4) After opening the door the following will be displayed and each location with a key will be released. After the Emergency Release has finished, the display will prompt you to close the door for that box. The Emergency Release can be canceled at any time by simply closing the door.

EMERGENCY  
RELEASE

then

CLOSE DOOR  
BOX ??

**Note:** If a box number that does not exist is chosen, the following will be displayed.

BOX DOES  
NOT EXIST

## KEY RETURN (AUTOMATIC)

The KeyWatcher provides two methods of returning keys to the system. A manual return of keys, which will allow the user to choose which box the key(s) will be returned to, and an automatic return of keys, which will allow the KeyWatcher to select which box the keys will be returned to. The KeyWatcher defaults to the Automatic key return method. (For more information on “Key Return Method” see page 24)

To return a key(s) to the KeyWatcher using the automatic key return method, follow these steps:

- 1) Press any key on the keypad to activate the system. The following will be displayed:

ENTER ID - PIN  
----- - -----

- 2) Enter your assigned 4-digit user ID number, followed by your 4-digit PIN, and press **ENT**. The following will be displayed:

REMOVE  
↓ KEYS

- 3) Press the down arrow until the following is displayed:

↑ RETURN  
↓ KEYS

- 4) Press **ENT**. The following will be displayed:

HOW MANY KEYS  
[1-100]: \_

- 5) Enter the number of keys that you will be returning and press **ENT**. The following will be displayed.

CHECKING FOR  
OPEN SLOTS

then

OPEN DOOR  
BOX ??

- 6) Open the door to the box that the KeyWatcher is prompting you to open and return the keys. The following will be displayed:

RETURN  
KEYS

then

KEY ????  
RETURNED

- 7) After the keys are returned the following will be displayed:

KEY RETURNS  
COMPLETED

**Note:** The KeyWatcher will have you open a door again if the door is closed before the total number of keys you entered are returned.

**Note:** If an attempt is made to return keys to the KeyWatcher when no keys are out, a message will be displayed saying No Keys In Use.

## KEY RETURN (MANUAL)

The KeyWatcher provides two methods of returning keys to the system. A manual return of keys, which will allow the user to choose which box the key(s) will be returned to, and an automatic return of keys, which will allow the KeyWatcher to select which box the keys will be returned to. The KeyWatcher defaults to the Automatic key return method. (For more information on “Key Return Method” see page 24)

To return a key(s) to the KeyWatcher using the manual key return method, follow these steps:

- 1) Press any key on the keypad to wake-up the system. The following will be displayed:

```
ENTER ID - PIN
  - - - - -
```

- 2) Enter your assigned 4-digit user ID number, followed by your 4-digit PIN, and press **ENT**. The following will be displayed:

```
REMOVE
↓      KEYS
```

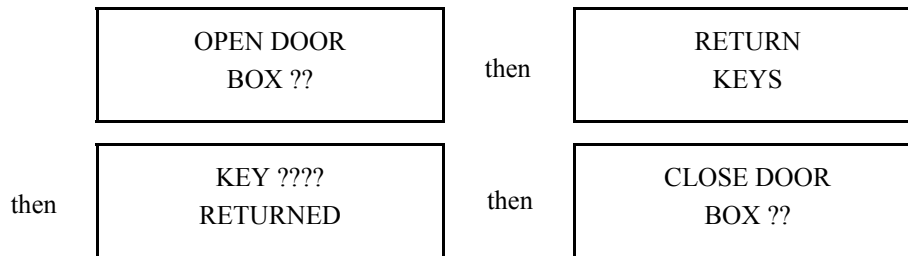
- 3) Press the down arrow until the following is displayed:

```
↑      RETURN
↓      KEYS
```

- 4) Press **ENT**. The following will be displayed: (If your system has only one box, skip to step 5.)

```
WHICH BOX
[1-15]: _
```

- 5) Enter the number of the box you wish to return the keys to and press **ENT**. The following will be displayed.



**Note :** If a box number that does not exist is chosen, the following will be displayed.

```
BOX DOES
NOT EXIST
```

**Note :** If a box that is full is chosen , the following will be displayed.

```
NO OPEN
SLOTS FOR KEYS
```

**Note:** If an attempt is made to return keys to the KeyWatcher when no keys are out, a message will be displayed that No Keys In Use.

## **KEY RETURN**

### **(SECURE KEY RETURN - OPTIONAL)**

The following describes the Secure Key Return feature.

There are five levels of Secure Key Return that may be set ONLY using the software. The following explains the possibilities when returning Keys with Secure Key Return feature, when the SECURE KEY RTN feature is enabled.

#### **Level 1**

Full secure - User's that are returning a key must be the same user's that removed the key.

#### **Level 2**

Department secure - A user that is returning a key must match the first user that initially removed the key exactly, the remaining users must match by departments.

#### **Level 3**

Department - The departments of the user's returning a key must match the departments of the user's that initially removed the key.

#### **Level 4**

Unsecure - User's returning a key will be required to match the number of logins that would be required to remove the key. For instance, 1 login will be required to return a single user key, 2 for dual user key, 3 for triple user key.

**Secure Off** - Any single user will be allowed to return a key.

**Note:** A level 1 user will automatically override the secure key return option.

Any violation of the secure key return rules will result in a RETURN VIOLATION alarm. The transaction that is created with the alarm will show an "RV" in the reports with the Level (1-4) of the violation appearing at the end of the line. A \* will also appear next to the key return transactions indicating the key return violation.

**NON-RANDOM  
(OPTIONAL)**

This option requires the keys to be returned to specific locations. There is a chart on page 135 that can be used to help keep track of the keys and the locations to which they are assigned. When filling out the chart, simply include the box and location number to which the key has been added. The operation of this feature is described below.

- 1) This option has no setting that needs to be enabled or disabled. The option, when purchased is automatically enabled when the system is shipped.
- 2) When keys are added to the system, each key will be assigned a location. The key number and location number do not have to be the same. At this time, the worksheet provided should be completed to keep track of the keys and the locations to which they are assigned.

Be sure when adding keys that the location the key is inserted into is not already assigned to another key. This will cause an invalid key alarm.

- 3) When keys are being removed from the system, there is no change in the operation.
- 4) When keys are being returned to the system, the user will be prompted to enter the key number for the key(s) to be returned.

When the system prompts the user to open the door, the light above the location to which the key being returned has been assigned will be lit. This is the location that the key **MUST** be returned. If the key is inserted into any other location, an invalid key alarm will be triggered.

If the instant key feature is being used to return keys and the user has only one key out of the system, the key number will automatically be used for the key return.

- 5) When a key has been assigned to a location, that key number will always be assigned to that location. Even when a key is deleted, the key number will still be assigned to that location. So, keep in mind when adding keys to the system that the lowest key number available will be the next key number assigned to the system.

**Example:** If key 1 has been deleted from the system and another key is being added, key 1 will be the next key number assigned and it will need to be added to the same location to which it was deleted.

## CHANGE PIN

If the user has access to levels 1 - 3, they will be allowed to change their own pin number. See page 64 for more information about the access levels.

To change your **PIN** number, follow these steps:

- 1) Press any key on the keypad to activate the system. The following will be displayed:

ENTER ID - PIN  
----- - -----

- 2) Enter your 4-digit user **ID** number, followed by your 4-digit **PIN** and press **ENT**. The following will be displayed.

REMOVE  
↓ KEYS

- 3) Press the down arrow key until the following is displayed:

↑ CHANGE  
PIN

- 4) Press **ENT**. The following will be displayed:

ENTER NEW PIN  
[xxxx]: \_

- 5) Enter the new **PIN** number that you want and press **ENT**. The following will be displayed:

VERIFY PIN  
[xxxx]: \_

- 6) Enter the same **PIN** number that you just entered to verify that you entered it correctly and press **ENT**. The following will be displayed:

USER PIN  
CHANGED

**Note:** This will be the new **PIN** number for the user that was logged into the KeyWatcher when Change **PIN** was selected and changed.

**Note:** If the following is displayed, the New **PIN** number and the Check did not match and the user will need to try again. The users **PIN** number was not changed and will be the same number that they originally logged on with before selecting change **PIN**.

NO PIN MATCH  
PIN NOT CHANGED

**Note:** To avoid use of the keypad on systems using the Card Access feature, an access level 4 should be assigned to the users. This will eliminate any chance of the user changing their **PIN** #.



# SECTION

## IV

### ALARMS



# ALARMS

---

The KeyWatcher is equipped with many types of alarms that will be triggered for a variety of reasons. These alarms, when activated, will cause the KeyWatcher to begin sounding an internal alarm (See page 27 for more information about “Alarm Sound”). Optional alarm contacts contained inside the KeyWatcher will be triggered for certain alarms. These optional contacts may be wired to an external alarm panel. These alarms may be printed directly to a serial printer or canceled by authorized personnel.

## ALARM TYPES

### **Problem Key**

Activated when a key is removed from the KeyWatcher without a valid user code request. This can also be triggered if the Smart Key is not being recognized by the system because it is not making contact inside the location. See the maintenance section for more information.

### **Invalid Problem Key**

Activated when an invalid key is removed from the KeyWatcher without a valid user code canceling the Invalid key alarm. This can also be triggered if the Smart Key is not being recognized by the system because it is not making contact inside the location. See the maintenance section for more information.

### **Key Not Taken**

Activated when a user requests a key, but does not remove it from the KeyWatcher.

### **Invalid Key Return**

Activated if a key that is not added to the system is returned. Please note that the invalid key return will sound an alarm, but will **NOT** trigger the relay alarm output. See the Add Key section for information about adding keys.

### **Illegal Entry**

Activated when the KeyWatcher’s door is opened without a valid user code being entered. This alarm will only be triggered when the door sensor is Enabled. (see page 21)

### **Door Left Open**

Activated when the door is left open after the removal or return of a key. This alarm will only be triggered when the door sensor is Enabled. (see page 21)

### **AC Power Loss**

Activated if the KeyWatcher loses AC power. This alarm is automatically canceled by the system when AC power is restored.

### **Overdue Key**

Activated if a key is not returned to the KeyWatcher prior to the programmed restriction time. If the alarm is cancelled and the key is still not returned within 24 hours from the original overdue time, it will activate the alarm again.

### **Ram Battery**

Activated when the internal Ram Battery on the CPU board has failed the ram battery test. If this alarm is triggered, verify that the Ram Battery Jumper is connected properly and reset the KeyWatcher. If the alarm keeps reoccurring, the ram battery may need to be replaced. This alarm is cancelled automatically by the system when the Ram Battery problem is corrected.

### **Printer**

Activated when the printer has stopped printing information. If this alarm is triggered, verify that the printer is ON-LINE, the printer is not out of paper, the cable is connected properly from the KeyWatcher to the printer and it is the correct cable.

### **Box Power loss**

Activated when the AC power has been lost on a specific box when AC detect is enabled. This alarm is automatically canceled by the system when AC power is restored to the box.

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### **Shorted Key Return**

Indicates that a shorted key (BAD KEY) has been returned to the system. Please note that the shorted key return will sound an alarm but will **NOT** trigger relay the alarm output.

### **Illegal Return**

Activated when a key has been returned to an incorrect location on a Non-Random (optional) system.

### **Box Battery Err**

Activated when the box has failed the battery backup test. If this alarm is triggered, cancel the alarm. If the alarm keeps reoccurring, the battery may need to be replaced in that box. This alarm is automatically canceled by the system when the box battery problem is corrected.

### **Archive Warning**

Activated when the transactions in the KeyWatcher have not been collected by the software. This alarm is automatically canceled by the system when transactions are gathered by the software or the Archive Warning feature is disabled.

### **Illegal Access**

Activated when 3 consecutive unsuccessful attempts are made at entering a user code. This alarm will only be triggered if the Access Enable feature is Enabled.(see page 22).

### **Cold Boot**

Activated when the KeyWatcher has been completely reset. This can occur if the ERASE DATABASE feature has been performed or the system was powered down, the Ram Battery Jumper removed and the system powered up.

### **Box Battery Low**

Activated when AC power has been lost and the backup battery is at a low voltage. Restore AC power and allow the battery to charge. If the alarm keeps reoccurring, the battery may need to be replaced in that box. This alarm is automatically canceled by the system when the box battery low problem is corrected.

### **Comm Lost**

Activated when communication to a box has been lost. If this alarm is triggered, verify that the cable to the box board is properly connected and reset the KeyWatcher. This alarm is automatically canceled by the system when communication is restored to the box.

### **Return Violation**

Activated when a Key Return is not valid according to the Secure Key Return feature. This is only available as an option.

## ALARM OUTPUTS

The KeyWatcher III has four sets of alarm contacts on the Alarm Output Board. Each set has one normally open contact and one normally closed contact. The following table shows which alarm output will be triggered for which alarm. See the Service & Maintenance section for more information about the alarm output board.

Alarm Type	Alarm Output Triggered	Alarm Type	Alarm Output Triggered
Overdue Key	1	AC Power loss (Slave)	3
Illegal Entry	4	Illegal Access	2
Door Left Open	3	Problem Key	2
AC Power loss (Master)	3	Return Violation	1

**Note:** If your system was supplied with the optional Duress alarm output, the Duress alarm will be triggered on output 4 and the Illegal Entry alarm will be triggered on output 2.

**Note:** The above table does not apply to any special configuration systems.

## CANCEL ALARMS

When an alarm is triggered, the KeyWatcher's display will read **ALARMS**. Upon accessing the KeyWatcher when it is alarming with an access level 1 or 2 user, they will be prompted "ALARMS EXIST CANCEL NOW?". If 'Y' is selected, the user will automatically be brought directly to step 3. If 'N' is selected or the user has access level 3 - 5, the system will operate as normal. To cancel the alarm(s), follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Alarms**. The following will be displayed.

CANCEL  
↓  
ALARMS

- 2) Press **ENT**. If there is no alarm(s) to be canceled, a message saying NO ALARMS EXIST will be displayed and the above will be displayed. If there are alarms, the following will be displayed:  
(Example shown - see page 103 for more information about alarm types)

ALARMS (1)  
↓  
ILLEGAL ENTRY

- 3) At this point, you can either cancel each individual alarm and receive a more precise description of the alarm (s), or cancel all the alarms at the same time with no other description of the alarm (s).

If you want a more precise description of each alarm as you cancel them, press **ENT** and skip to step 3-A.

If you do not want more of a description about each alarm, press the down arrow key and skip to step 3-B.

A) The following will be displayed if **ENT** was selected at step 3.

ILLEGAL ENTRY  
BOX 01

Here you can view a more precise description of the alarm (s). If multiple alarms exist, you may scroll up and down viewing each of them. When you have seen the alarm, press **ENT**. The following will be displayed.

Press **CLR** to return to step 3.

**Y** = Cancel alarm.

**N** = Do not cancel alarm.

CANCEL ALARM?  
  
Y/N

If you would like to cancel the alarm that was displayed, select 'Y' and press **ENT**. The display will say that the alarm was canceled. If more alarms exist, you will be returned to step 3-A. When all of the alarms have been canceled, the display will show NO ALARMS EXIST and return to the title screen.

If you would not like to cancel the alarm that was displayed, select 'N' and press **ENT**. The display will then return to step 3-A.

B) The following will be displayed if the down arrow was pressed at step 3.

↑  
CANCEL ALL  
ALARMS?

If you would like to cancel all the alarms, press **ENT**. The display will show NO ALARMS EXIST and return to the title screen.

If you would not like to cancel all the alarms, press the up arrow key and return to step 3.

**Note:** If you would like a print out of the alarms report, be sure to print it prior to canceling the alarm(s).

## **PRINT ALARMS**

When an alarm is triggered, the KeyWatcher's display will read **ALARMS**. Upon accessing the KeyWatcher when it is alarming, with an access level 1 or 2 user, they will be prompted "ALARMS EXIST CANCEL NOW?". If 'Y' is selected the user will automatically be brought directly to alarm activated and not be able to print the alarm. If 'N' is selected or the user has access level 3 - 5, the system will operate as normal. The alarm report can be printed directly to a serial printer connected directly to the KeyWatcher. To print the alarm, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Alarms**. The following will be displayed:

↓	CANCEL ALARMS
---	------------------

- 2) Press the down arrow key until the following is displayed:

↑	PRINT ALARMS
---	-----------------

- 3) Press **ENT**. If there is no alarm(s) to be printed, a message saying NO ALARMS TO PRINT will be displayed and the above will be displayed. If there is alarm(s) to be printed, the following will be displayed, the report will begin printing and the display will the automatically return to step 2.

REPORT QUEUED
------------------

# SECTION

V

GENERATE  
REPORTS





# GENERATE REPORTS

---

The KeyWatcher tracks the movement of every key installed. Every time a key is removed, the KeyWatcher records who takes the key, and when. When keys are returned, it once again records this data. The KeyWatcher holds 4000 transactions in memory. The reports that may be generated are listed below. The reports can be printed directly to a serial printer connected directly to the KeyWatcher. The printer is to be connected to COM 2 on the master CPU board. See the Service & Maintenance section for more information. If you want to print this information using a computer, see your Key-Pro III Software Manual. The reports in the Key-Pro III software offer more precise information than printing directly from the KeyWatcher.

To generate reports directly to a serial printer, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Generate Reports**. The following will be displayed:



There are 6 report types that may be selected.

## REPORT TYPES

- 1) **AUDIT USER**
  - 2) **AUDIT KEY**
  - 3) **KEYS IN USE**
  - 4) **OVERDUE KEYS**
  - 5) **PRINT BY DATES (ALL EVENTS)**
  - 6) **PRINT TRANSACTIONS**
- 2) Select the type of report to be generated and press **ENT**. See the following pages for more information about generating the specific report that you need.

**Note:** If the printer is not ON-LINE, the printer is out of paper, the cable is not connected from the KeyWatcher to the printer, the wrong cable is connected from the KeyWatcher to the printer, or the printer is currently printing a report, the following will be displayed when any of the reports are generated.



## AUDIT USER

This report type will give the access history of any user requested. This report will give all transactions a user made between any 2 dates, provided the dates entered are still in memory. See page 150 for a sample audit user report. To generate an Audit Trail by User, follow these steps:

- 1) Select Main Menu item **Generate Reports**. The following will be displayed:

```

      AUDIT
      ↓
      USER

```

- 2) Press **ENT**. The following will be displayed:

```

ENTER USER NUM
[xxxx]: _

```

- 3) Enter the number of the user you wish to audit and press **ENT**. The following will be displayed:

```

      ENTER
      START DATE

```

 then 

```

      MM / DD / YYYY
      01 / 01 / 2004

```

- 4) This information will tell the KeyWatcher the exact day to begin the report on. Enter the month, day and the year and press **ENT**. The date format will vary depending on the date format set in the KeyWatcher. The date that appears is the default start date. The following will be displayed:

```

      ENTER
      END DATE

```

 then 

```

      MM / DD / YYYY
      05 / 13 / 2004

```

- 5) This information will tell the KeyWatcher the exact day to finish the report on. Enter the month, day and the year and press **ENT**. The date format will vary depending on the date format set in the KeyWatcher. The current date in the KeyWatcher is the default for the end date. The following will be displayed and the report will begin to print.

```

      REPORT
      QUEUED

```

## AUDIT KEY

This report type will give the access history of any key requested. This report gives all activity of a key between any 2 dates, provided the dates entered are still in memory. See page 151 for a sample audit key report. To generate an Audit Trail by Key, follow these steps:

- 1) Select Main Menu item **Generate Reports**. The following will be displayed:

```
↓      AUDIT
      USER
```

- 2) Press the down arrow key until the following is displayed:

```
↑      AUDIT
↓      KEY
```

- 3) Press **ENT**. The following will be displayed:

```
ENTER KEY NUMBER
[xxxx]: _
```

- 4) Enter the number of the key you wish to audit and press **ENT**. The following will be displayed:

```
ENTER          then      MM / DD / YYYY
START DATE          01 / 01 / 2004
```

- 5) This information will tell the KeyWatcher the exact day to begin the report on. Enter the month, day and the year and press **ENT**. The date format will vary depending on the date format set in the KeyWatcher. The date that appears is the default start date. The following will be displayed:

```
ENTER          then      MM / DD / YYYY
END DATE          05 / 13 / 2004
```

- 6) This information will tell the KeyWatcher the exact day to finish the report on. Enter the month, day and the year and press **ENT**. The date format will vary depending on the date format set in the KeyWatcher. The current date in the KeyWatcher is the default for the end date. The following will be displayed and the report will begin to print.

```
REPORT
QUEUED
```

## **KEYS IN USE**

This type of report will show which keys are currently being used, by whom they are being used, and whether any of the keys are overdue. See page 152 for a sample keys in use report. To generate a Keys In Use Report, follow these steps:

- 1) Select Main Menu item **Generate Reports**. The following will be displayed:

↓	AUDIT USER
---	---------------

- 2) Press the down arrow key until the following is displayed:

↑	KEYS
↓	IN USE

- 3) Press **ENT**. The following will be displayed and the report will begin printing.

REPORT QUEUED
------------------

**Note:** If no keys are in use, a message will be displayed and no report will be printed.

## **OVERDUE KEYS**

This type of report will show which keys are overdue. This report will only operate if time restrictions are being used. See page 153 for a sample overdue keys report. To generate an Overdue Keys Report, follow these steps:

- 1) Select Main Menu item **Generate Reports**. The following will be displayed:

↓	AUDIT USER
---	---------------

- 2) Press the down arrow until the following is displayed:

↑	OVERDUE
↓	KEYS

- 3) Press **ENT**. The following will be displayed and the report will begin printing.

REPORT QUEUED
------------------

**Note:** If no keys are overdue, a message will be displayed and no report will be printed.

## PRINT BY DATES

This report type will give the access history of every transaction that occurred. This report will give all transactions made between any 2 dates, provided the dates entered are still in memory. See page 154 for a sample print transactions report. To generate a By Dates report, follow these steps:

- 1) Select Main Menu item **Generate Reports**. The following will be displayed:

↓	AUDIT USER
---	---------------

- 2) Press the down arrow until the following is displayed:

↑	PRINT BY
↓	DATES

- 3) Press **ENT**. The following will be displayed:

ENTER START DATE	then	MM / DD / YYYY <u>0</u> <u>1</u> / <u>0</u> <u>1</u> / <u>2</u> <u>0</u> <u>0</u> <u>4</u>
---------------------	------	---

- 4) This information will tell the KeyWatcher the exact day to begin the report on. Enter the month, day and the year and press **ENT**. The date format will vary depending on the date format set in the KeyWatcher. The date that appears is the default start date. The following will be displayed:

ENTER END DATE	then	MM / DD / YYYY <u>0</u> <u>1</u> / <u>1</u> <u>3</u> / <u>2</u> <u>0</u> <u>0</u> <u>4</u>
-------------------	------	---

- 5) This information will tell the KeyWatcher the exact day to finish the report on. Enter the month, day and the year and press **ENT**. The date format will vary depending on the date format set in the KeyWatcher. The current date in the KeyWatcher is the default for the end date. The following will be displayed and the report will begin to print.

REPORT QUEUED
------------------

## PRINT TRANSACTIONS

This type of report will continuously print each transaction as it occurs to a parallel printer connected directly to the KeyWatcher. See page 154 for a sample print transactions report. To turn this function on or off follow these steps. The default setting for this option is OFF.

- 1) Select Main Menu item **Generate Reports**. The following will be displayed:

↓ AUDIT USER
--------------------

- 2) Press the down arrow until the following is displayed:

↑ PRINT TRANSACTIONS
----------------------------

- 3) Press **ENT**. The following will be displayed:

**Y** = Print Transactions ON.

**N** = Print Transactions OFF.

TRANSACTIONS ENABLE?    Y/ <u>N</u>
--

- 4) Use the arrow keys to select whether the Print Transactions enabled or disabled and press **ENT**. Depending on what you choose one of the following will be displayed:

TRANSACTIONS ENABLED
-------------------------

or

TRANSACTIONS DISABLED
--------------------------

SECTION

VI

UTILITY MENU





# UTILITY MENU

---

The functions covered in this chapter are special functions occasionally used in the KeyWatcher III. All of the functions described in this section are located in the Utility Menu.

## REPLACE KEY

Replacing a key allows the programmer to replace an existing key (because it was lost or broken) with a new key. All of the same restrictions will apply to the new key and the key will have the same key number.

To replace an existing key, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Utilities**. The following will be displayed:

```
REPLACE
  ↓
  KEY
```

- 2) Press **ENT**. The following will be displayed:

```
ENTER KEY NUMBER
[xxxx]: _
```

- 3) Enter the number of the key you wish to replace and press **ENT**. The following will be displayed: (If your system has only one box, the following will be skipped) (If the key being replaced is in the KeyWatcher, you will be prompted at this point to open the door and remove the key and the following will be skipped)

```
WHICH BOX
[1-15]: _
```

- 4) Enter the number of the box that you want to insert the new key into and press **ENT**. The top of the next page will be displayed:

```
INSERT KEY IN
  BOX ??
```

- 6) Insert the new key in the box number indicated, the following will be displayed:

```
KEY
REPLACED
```

then

```
CLOSE DOOR
  BOX ??
```

- 7) Close the door and the new key will have all of the same restrictions for every user as the key that was replaced.

**Note:** If the key was not replaced or an attempt to replace a key that does not exist is made, one of the following will be displayed:

```
KEY
NOT REPLACED
```

or

```
KEY
NOT FOUND
```

## **IDENTIFY**

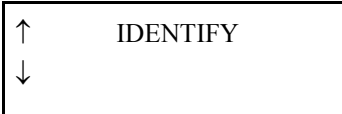
This function is used to show the serial number and the version of firmware in the KeyWatcher. You may be asked to use this function if you are calling for technical support.

- 1) Access the KeyWatcher and select Main Menu item **Utilities**. The following will be displayed:



```
↓
  REPLACE
  KEY
```

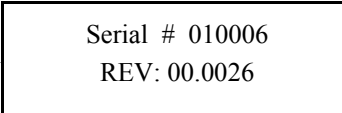
- 2) Press the down arrow key until the following is displayed:



```
↑
  IDENTIFY
↓
```

- 3) Press **ENT**. The following will be displayed and the display will return to step 1.

**EXAMPLE:** →



```
Serial # 010006
REV: 00.0026
```

## RELEASE LOCATION

This function allows the user to release keys by the number of the location it is stored in rather than by the number of the key. This function can be used to release a location that is not recognizing the key. To release a key by location, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Utilities**. The following will be displayed:

↓  
REPLACE  
KEY

YOU MUST KNOW THE NUMBER OF THE  
BOX AND SLOT PRIOR TO PERFORMING  
THE RELEASE LOCATION FUNCTION.

- 2) Press the down arrow key until the following is displayed:

↑  
RELEASE  
↓  
LOCATION

- 3) Press **ENT**. The following will be displayed: (If your system has only one box, skip to step 5)

WHICH BOX  
[1-15]: \_

- 4) Enter the number of the box you wish to release the location in and press **ENT**. The following will be displayed.

WHICH SLOT  
[1-60]: \_

- 5) Enter the number of the slot (location) you wish to release and press **ENT**. The following will be displayed.

OPEN DOOR  
BOX ??

- 6) Open the door to the box number indicated and the location selected will release just as if the key were being removed. The following will be displayed:

RELEASE  
LOCATION ??

- 7) Remove the key to the location number specified. The following will be displayed:

CLOSE DOOR  
BOX ??

- 8) Close the door and the display will return to step 3.

## RELEASE DOOR LATCH

This function allows the user to release the door latch. This is used for diagnostic purposes. To release the door latch, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Utilities**. The following will be displayed:

```
REPLACE
  ↓
  KEY
```

- 2) Press the down arrow key until the following is displayed:

```
↑  RELEASE
↓  DOOR LATCH
```

- 3) Press **ENT**. The following will be displayed: (If your system has only one box, the following will be skipped)

```
WHICH BOX
[1-17]: _
```

- 4) Enter the number of the box you wish to release the door latch in and press **ENT**. The following will be displayed.

```
OPEN DOOR
  BOX ??
```

- 5) At this point the door latch will release and the door may be opened. If the door sensor is enabled, the Illegal Entry alarm will be triggered when the door is opened. The display will return to step 2.



## SYSTEM RESTART

This function allows the user to restart the system. To restart the system, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Utilities**. The following will be displayed:

```
REPLACE
  ↓
  KEY
```

- 2) Press the down arrow key until the following is displayed:

```
↑  SYSTEM
↓  RESTART
```

- 3) Press **ENT**. The following will be displayed:

```
SYSTEM
RESTART?  Y/N
```

- 4) Select 'N' to cancel and return to step 2. Select 'Y' to restart system and refer to page 6 step 5.

## CLEAR LIST OF TRANSACTIONS

This function allows the user to delete all transactions stored in the KeyWatcher while keeping the database intact. Keep in mind that no reports may be generated on old transactions once this function is performed. To clear transactions, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Utilities**. The following will be displayed:

```
REPLACE
  ↓
  KEY
```

- 2) Press the down arrow key until the following is displayed:

```
↑  CLEAR LIST OF
↓  TRANSACTIONS
```

- 3) Press **ENT**. The following will be displayed:

```
ARE YOU SURE?
                                     Y/N
```

- 4) If you are sure that you would like to clear all of the past transactions for the KeyWatcher's memory, select 'Y' and press **ENT**. The display will then return to step 1. If you are not sure if you would like to clear all of the past transactions from the KeyWatcher's memory, select 'N' and press **ENT**. The display will then return to step 1.

## **ERASE DATABASE**

This function allows a supervisor to restart the system and clear all the programming. Any keys in the system will be learned as described in the programming example on page 10, step 1-A. This will force the user to completely reprogram the KeyWatcher. To erase the database, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Utilities**. The following will be displayed:

```
REPLACE
↓
KEY
```

- 2) Press the down arrow key until the following is displayed:

```
↑
↓
ERASE
DATABASE
```

- 3) Press **ENT**. The following will be displayed:

```
ERASE
DATABASE? Y/N
```

- 4) Select 'N' to cancel and return to step 2. Select 'Y' to erase the database and restart the system. The following will be displayed:

```
ARE YOU SURE?
Y/N
```

- 5) If you are not sure, select 'N' and return to step 2. If you are sure, select 'Y' and refer to page 6 step 5.

## BOX SELF LEARN UTILITY

This function allows a box to be assigned numbers to each location. This function is configured at the factory and will not need to be changed unless additional locations are added to the box. To perform the box self learn utility, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Utilities**. The following will be displayed:

```
REPLACE
↓
KEY
```

- 2) Press the down arrow key until the following is displayed:

```
↑ BOX SELF LEARN
↓
UTILITY
```

- 3) Press **ENT**. The following will be displayed: (If your system has only one box, the following will be skipped)

```
WHICH BOX
[1-15]: _
```

- 4) Enter the number of the box to which the self learn will be performed and press **ENT**. The following will be displayed.

```
OPEN DOOR
BOX ??
```

- 5) At this point the door may be opened. Follow the instructions on the display using a single key. The display will ask the user between each location assigned if More Locations are to be assigned. Select **Y** and press **ENT** until all the locations have been assigned a number. When all the locations have been assigned a number, select **N** and press **ENT**. The display will return to step 2.

If an attempt is made to perform the Box Self Learn Utility on a box that is not configured for the Self Learn Utility, a message will be displayed indicating **BOX NOT SET FOR SELF LEARN MODE**.

### IMPORTANT NOTES REGARDING BOX SELF LEARN UTILITY

All keys must be removed from the panel prior to performing the Box Self-Learn Utility.

If the Box Self Learn Utility is performed on a box that has already been learned, the new Self Learn setting will only take effect until the system is reset. The **CLEAR BOX SELF LEARN MAPS** must be performed first in order for the Self Learn to be permanent



## CLEAR BOX SELF LEARN MAPS

This function allows the user to clear all box self learn maps. This function will not need to be changed unless additional locations are added to a box that has a self learn map assigned. To perform the clear box self learn maps, follow these steps:

- 1) Access the KeyWatcher and select Main Menu item **Utilities**. The following will be displayed:

REPLACE  
↓  
KEY

- 2) Press the down arrow key until the following is displayed:

↑ CLEAR ALL BOX  
SELF-LEARN MAPS

- 3) Press **ENT**. The following will be displayed: (If your system has only one box, the following will be skipped)

CLEAR SELF-LEARN  
Y/N

- 4) If Y is selected all Self-Learn maps will be cleared and any box configured for Self-Learn will need to perform the Box Self-learn Utility in order to operate. The display will return to step 3

ARE YOU SURE  
Y/N

- 5) If you are not sure, select 'N' and return to step 2. If you are sure, select 'Y' and the following will be displayed and then return to step 2.

ALL SELF-LEARN  
MAPS CLEARED

## TEST RELAY BOARD ROW

This function allows the user to test a row on a relay board and should only be performed when instructed by technical support.

## TEST ALARM RELAYS

This function allows the user to test the alarm outputs (optional) and should only be performed when instructed by technical support.

**SECTION**

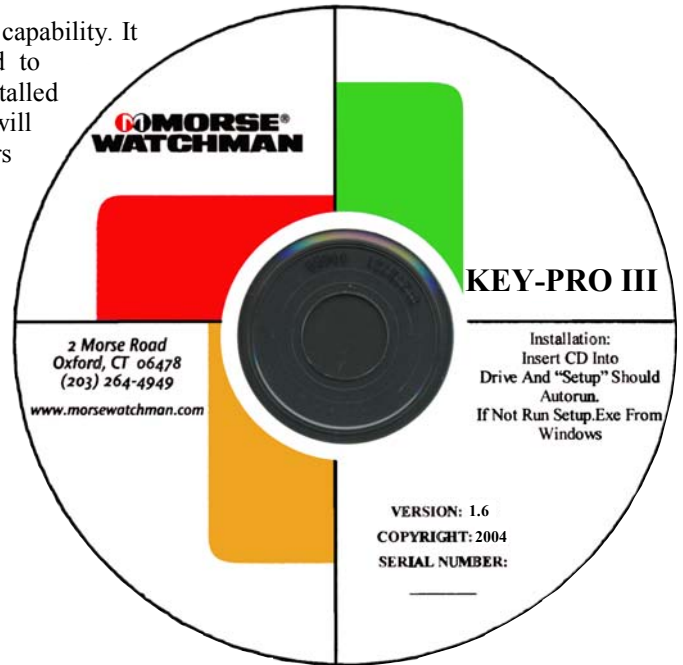
**VII**

**SOFTWARE**

## SOFTWARE PACKAGE

The Key-Pro III software has been designed for complete user capability. It can be setup on one or multiple computers and configured to monitor & program up to 50 KeyWatcher systems. It can be installed on a main computer that will be used as the Master that will perform all functions and also installed on additional computers that can be used for all features besides programming.

The KeyWatcher may be used as a stand alone system and does not require a computer. However, the software has been designed to make programming, monitoring, generating reports, and saving vital information easy and user friendly. Morse Watchman highly recommends that the system be used in conjunction with the Key-Pro III software.



## MODEM COMMUNICATION

If you plan to use the KEY-PRO III software through a modem, the following Dip Switch settings and strings have been tested to operate fine with an external US Robotics Sportster. Be sure to connect to modem at 19200 BAUD when configuring. Also be sure the PV COMM PORT setting is set for modem.

<b>DIP SWITCH SETTINGS FOR US ROBOTICS MODEM (REMOTE SITE)</b>					
1	DOWN	4	DOWN	7	UP
2	UP	5	UP	8	DOWN
3	UP	6	UP		

<b>REMOTE (KEYWATCHER) MODEM CONFIGURATION</b>
<b>AT&amp;F0E0Q0</b>
<b>ATX4&amp;A3&amp;B1&amp;M4&amp;N10&amp;U10</b>
<b>AT&amp;W0</b>
<b>AT&amp;W1</b>

**Press ENTER after each string has been entered.**

Please keep in mind that these configurations have been tested with the modems that we supply. Due to variations in the Hayes protocol, your modem may differ slightly. If these configurations do not work with your modems, you will need to refer to the manual for your modem.

**SECTION**

**VIII**

**REFERENCE**

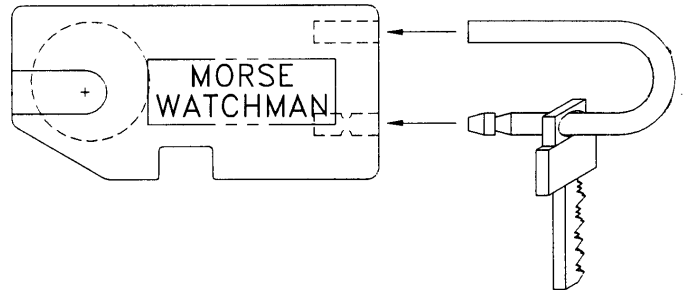


# REFERENCE

## ATTACHMENT OF KEYS TO SMART KEYS

If you ordered the tamper proof Smart keys it will come in two pieces, the Smart key and the Steel Ring. Once you have completed the New Key Worksheet it is time to attach your keys to the smartkey. Follow the steps below:

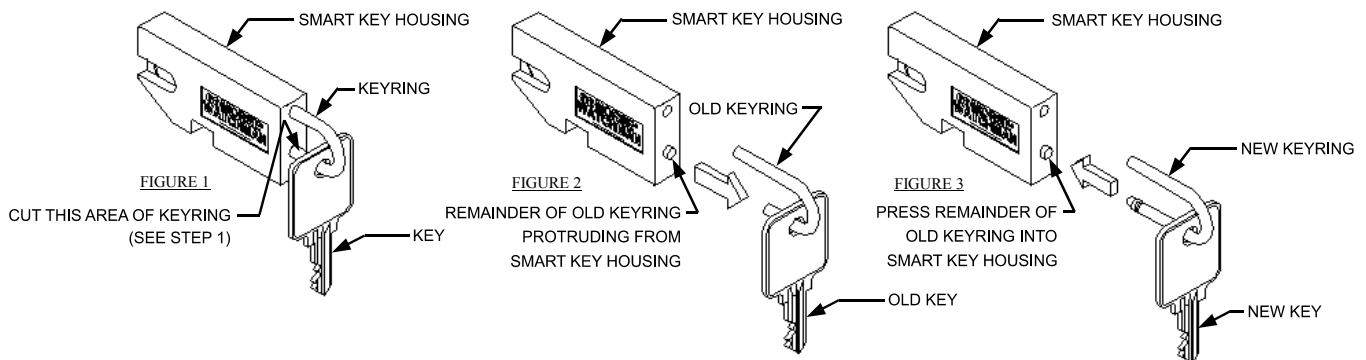
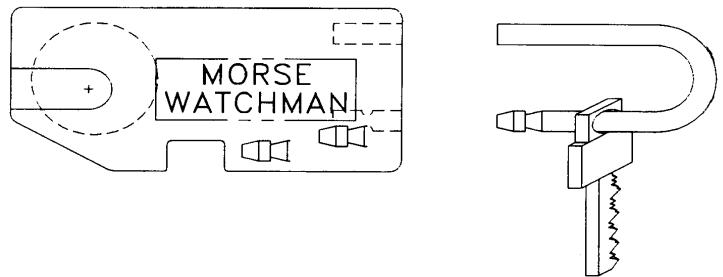
- 1) Place the key(s) onto the steel ring.
- 2) INSERT THE TAPERED END OF THE STEEL RING INTO THE BOTTOM OF THE SK30 AND PRESS IN UNTIL THE STEEL RING SNAPS IN PLACE. (SEE DIAGRAM ON RIGHT)



## REPLACING KEYS ON SMART KEYS

To replace a key on a tamper-proof Smart key, follow the steps below.

- 1) Cut the bottom section of the keyring as close as possible to the smart key housing (See Figure 1).
- 2) Remove the old key and keyring, leaving the remainder of the old keyring in the smart key (See Figure 2).
- 3) Install the new key and keyring. When installing the new keyring, use the new keyring to push the remainder of the old keyring into the smart key housing (See Figure 3 and diagram on right). Do not use any objects other than the new keyring for this purpose.



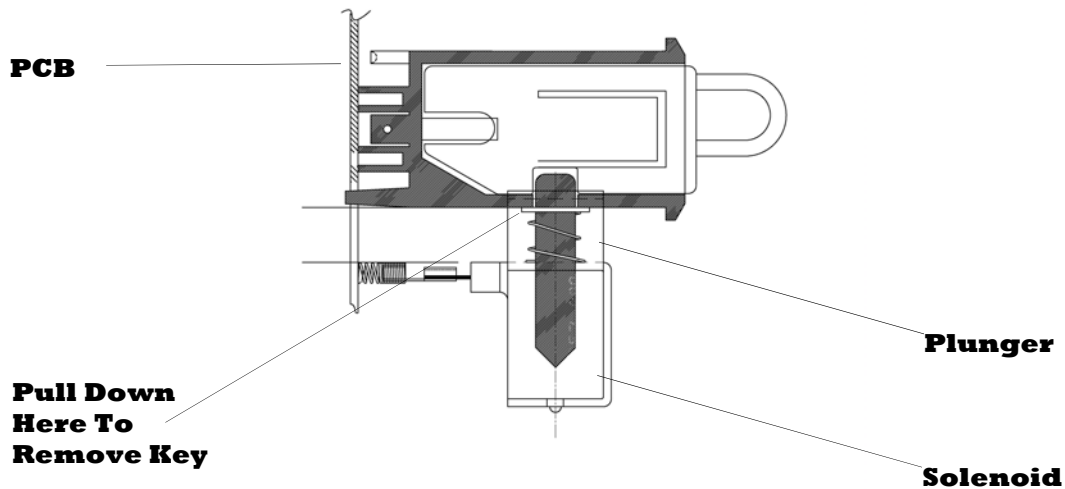
**Note: This process may be repeated 3 times before the SmartKey will not be able to accept any more keyrings. At that time the Smart Key must be replaced or refurbished.**

## **BATTERY BACKUP**

The KeyWatcher has a backup battery for each box that will last approximately 48 hours. You will be able to release and return keys normally within this time period. If for any reason your power is not back in 48 hours, you must release the keys manually by using the master key for the KeyWatcher. In the event AC power is lost, the KeyWatcher's display will read AC POWER ALARM and an alarm will sound (If the alarm sound is turned on) until AC power returns. The KeyWatcher also has a red LED on each box which remains illuminated whenever AC power is present. The master CPU board has a RAM battery that will allow the KeyWatcher to maintain its programming even after a long term power failure.

## **REMOVING A KEY MANUALLY**

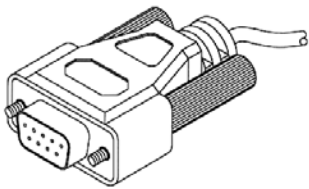
In the event that keys become stuck in the KeyWatcher and need to be removed manually, follow the instructions in the service section for disassembling the KeyWatcher. Once the unit is disassembled, keys may be removed by pulling the plunger of the key location down by hand and removing the key (see diagram of key location below).



**SIDE VIEW OF KEY LOCATION**

## CABLE ASSEMBLIES

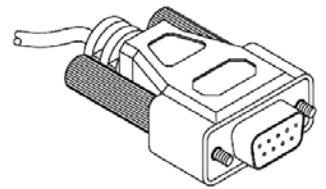
**Model 24-4** - Used to connect the KeyWatcher to a computer's serial port (9 pin)



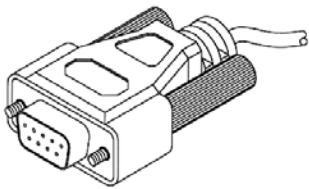
To KeyWatcher  
9 pin female

Pin outs		
<u>KW End</u>	to	<u>PC End</u>
1	to	1
2	to	3
3	to	2
5	to	5

To Computer  
9 pin female



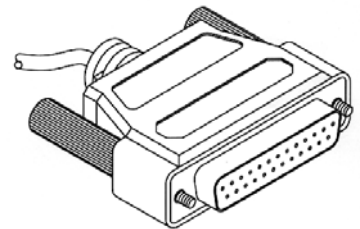
**Model 21-4** - Used to connect the KeyWatcher to a computer's serial port (25 pin) (optional).



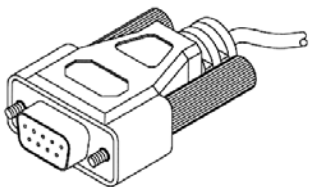
To KeyWatcher  
9 pin female

Pin outs		
<u>KW End</u>	to	<u>PC End</u>
1	to	1
2	to	2
3	to	3
5	to	7

To Computer  
25 pin female



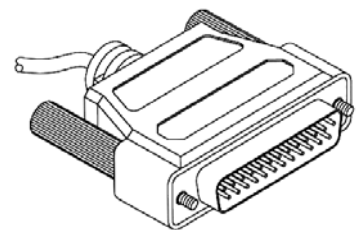
**Model 26-4** - Used to connect the KeyWatcher to a modem (optional).



To KeyWatcher  
9 pin female

Pin outs		
<u>KW End</u>	to	<u>Modem</u>
1	to	1
2	to	3
3	to	2
5	to	7

To Modem  
25 pin male





# SECTION

## IX

### CHARTS







# USER / RESTRICTION CHART

Use the following chart for each user that will be added to the system. Make copies as necessary.

**USER ID (4-DIGITS):** \_\_\_\_\_ **USER PIN (4-DIGITS):** \_\_\_\_\_

**FIRST NAME:** \_\_\_\_\_ **LAST NAME:** \_\_\_\_\_

**ONE TIME USERCODE:** Y\_\_N\_\_ **EMERGENCY RELEASE:** Y\_\_N\_\_

**MULTIPLE KEY ACCESS:** Y\_\_N\_\_ **ACCESS LEVEL (1-5):** \_\_\_\_\_

**DEPARTMENT ID (0-15):** \_\_\_\_\_ **RESTRICTED KEYS:** Y\_\_N\_\_

**INSTANT KEY RELEASE:** Y\_\_N\_\_ **CARD READER ACCESS:** Y\_\_N\_\_

Use the following charts if this user will be assigned user restrictions. Each user may have 25 restrictions. A restriction may be either a single key restriction or a group restriction. If additional restrictions need to be applied, use the restrictions chart.

Enter each key number, name, time zone, and days of the week to which this user will have a single key restriction.

KEY NUMBER:	KEY NAME:	TIME ZONE:	DAYS:
			S M T W T F S
			S M T W T F S
			S M T W T F S
			S M T W T F S

Enter each group number, name, time zone, and days of the week to which this user will have a group restriction.

GROUP NUMBER:	GROUP NAME:	TIME ZONE:	DAYS:
			S M T W T F S
			S M T W T F S
			S M T W T F S
			S M T W T F S
			S M T W T F S
			S M T W T F S
			S M T W T F S
			S M T W T F S
			S M T W T F S
			S M T W T F S









# SECTION

X

EXAMPLE REPORTS



# TRANSACTIONS & ABBREVIATIONS

Some of the following alarm/transactions & abbreviations will appear on reports. They can be defined as follows:

Alarms (Definitions on page 103)			
PROBLEM KEY (1)	INV PROBLEM KEY (2)	KEY NOT TAKEN (3)	INVALID KEY (4)
ILLEGAL ENTRY (5)	DOOR LEFT OPEN (6)	AC POWER LOSS (7)	OVERDUE KEY (8)
RAM BATTERY (9)	PRINTER (10)	BOX POWER LOSS (11)	SHORTED KEY (12)
ILLEGAL RETURN (13)	BOX BATTERY ERR (14)	ARCHIVE WARNING (15)	ILLEGAL ACCESS (16)
COLD BOOT (17)	BATTERY LOW (18)	COMM LOST (19)	RET VIOLATION (20)

Transactions	
Transaction	Definition
DB DOWNLOAD	This transaction will occur when a Send Database is performed from the Key-Pro III software.
WARM BOOT	This transaction will occur when the system is reset with a valid database.
COLD BOOT	This transaction will occur when the system is reset without a valid database.
MAIN AC ON	If AC power was lost, this transaction will occur after it has been restored to the system.
ALARM CANCEL	This transaction will occur every time an alarm is canceled. The report will also have a number along side the transaction code that specifies the alarm that was canceled. (See above chart.)
RMVD INVLD KEY	This transaction will occur every time an invalid key is removed from the system.
RMVD SHRTD KEY	This transaction will occur every time a shorted key is removed from the system.
USER LOGGED ON	This transaction will occur every time a valid user logs on to the system.
COMM LOST	This transaction will occur when the Master CPU loses communication with the box.
COMM RESTORED	This transaction will occur when the Master CPU restores communication with the box.
LEVEL	This transaction will occur when Return Violation is triggered with a number indicating level.
DATE SET	This transaction will occur each time the date is set.
TIME SET	This transaction will occur each time the time is set.
DUAL USER	This transaction will occur when a dual user key is removed with a number indicating 1 or 2.
TRIPLE USER	This transaction will occur when a triple user key is removed with a number indicating 1, 2 or 3.
UNKNOWN USER	This will appear as the name of the person any time a transaction occurs when a user is not logged into the KeyWatcher. It will also appear when the KeyWatcher first starts up and keys are added.

Abbreviations		Abbreviations	
Abbreviation	Definition	Abbreviation	Definition
AK	Added key.	ER	Emergency release.
AU	Added user.	EU	Edited User.
AG	Added group.	ET	Edited time zone.
AT	Added Time Zone.	IN	Key returned.
DG	Deleted group.	L	Location.
DK	Deleted key.	OUT	Key removed.
DT	Deleted time zone.	PK	Problem key.
DU	Deleted user.	RK	Replaced key.
EG	Edited group.	RL	Release location.
EK	Edited key.	RV	Return violation.

**Sample KeyWatcher III Report**  
**(List of Keys)**

M O R S E    W A T C H M A N S

K E Y W A T C H E R    R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER III

REPORT DATE: 05/22/04  
REPORT TIME: 15:23

REPORT TYPE: LIST OF KEYS  
SYSTEM SERIAL NUMBER: 010006 - 00.0027  
PAGE 1

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BOX	KEY	SLOT	KEYNAME	DUAL	TRIPLE	RETURN LEVEL
1	1	6	SERVICE	YES	NO	LEVEL 1
1	2	5	PRODUCTION	NO	YES	LEVEL 2
1	3	4	VEHICLE 1	NO	YES	LEVEL 3
1	4	16	VEHICLE 2	NO	NO	
	5		ENGINEERING	NO	YES	LEVEL 4
	6		KEY0006	NO	NO	
1	7	3	KEY0007	YES	NO	LEVEL 1
1	8	15	KEY0008	NO	NO	
1	9	18	KEY0009	NO	NO	
1	10	19	KEY0010	NO	NO	
1	11	20	KEY0011	NO	NO	
1	12	2	KEY0012	NO	NO	
1	13	8	KEY0013	NO	NO	
1	14	17	KEY0014	NO	NO	
1	15	12	KEY0015	NO	NO	
1	16	10	KEY0016	NO	NO	
1	17	13	KEY0017	NO	NO	

---

TOTAL KEYS = 17

END OF REPORT

***Date format (month/day/year) may vary, depending upon the appropriate format used in your country.***

**Sample KeyWatcher III Report  
(Group List)**

M O R S E    W A T C H M A N S  
K E Y W A T C H E R    R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER

REPORT DATE: 05/22/04  
REPORT TIME: 16:19

REPORT TYPE: GROUP LIST  
SYSTEM SERIAL NUMBER: 010006 - 00.0027  
PAGE 1

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GROUP	GROUP NAME	KEYS IN GROUP									
1	SERVICE	2	3	4	6						
2	PRODUCTION	2	3	4	5	6	7	8	9	10	11
		12	13	14	15	16	17				
3	ENGINEERING	1	8	5							
4	SHIPPING	2	3	4							

TOTAL GROUPS = 4

END OF REPORT

***Date format (month/day/year) may vary, depending upon the appropriate format used in your country.***

*Sample KeyWatcher III Report  
(User List (Full))*

M O R S E   W A T C H M A N S  
K E Y W A T C H E R   R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER

REPORT DATE: 05/22/04  
REPORT TIME: 13:40

REPORT TYPE: USER LIST  
SYSTEM SERIAL NUMBER: 010006 - 00.0027

PAGE 1

-----  
USER CODE: 002

ACCESS TO MAIN MENU: LEVEL2

EMERGENCY RELEASE: NO

CARD READER ACCESS: NO

LAST NAME: Tucker  
FIRST NAME: William

RESTRICTIONS: YES  
MULTIPLE KEY ACCESS: YES  
ONE TIME USERCODE: NO

KEY TO	TIME	TIME OUT	TIME IN	DAYS
RESTRICT	ZONE			
1		NO TIME RESTRICTION		SMTWTF5
2	25	DURATION	23:51	.MTWTF.
3	25	DURATION	23:51	.MTWTF.
4	25	DURATION	23:51	.MTWTF.
14	24	08:00	09:00	SMTWTF5

END OF REPORT

*Date format (month/day/year) may vary, depending upon the appropriate format used in your country.*

**NOTE: IF YOU GENERATE A FULL USER LIST FOR ALL USERS, YOU WILL RECEIVE AT LEAST ONE PAGE FOR EVERY USER PROGRAMMED IN THE KEYWATCHER SYSTEM.**

**Sample KeyWatcher III Report  
(List Of Users (Partial))**

M O R S E    W A T C H M A N S  
K E Y W A T C H E R    R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER

REPORT DATE: 05/22/04  
REPORT TIME: 13:52

REPORT TYPE: LIST OF USERS  
SYSTEM SERIAL NUMBER: 010006 - 00.0027

PAGE 1

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USER CODE	LASTNAME	FIRSTNAME	RESTRS.	EMERG. RELEASE	CARD ACCESS	MULTIKEY ACCESS	ONETIME
000	Watchman	Morse	NO	YES	NO	YES	NO
001	Oulundsen	Kolin	YES	NO	NO	YES	NO
002	Tucker	William	YES	NO	NO	YES	NO
003	Travolta	Tony	YES	NO	NO	YES	NO
004	Granitto	Joseph	YES	NO	NO	YES	NO
005	Kelly	Jason	YES	NO	NO	YES	NO

---

TOTAL USERS = 6

END OF REPORT

***Date format (month/day/year) may vary, depending upon the appropriate format used in your country.***

**Sample KeyWatcher III Report  
(Time Zone List)**

M O R S E    W A T C H M A N S  
K E Y W A T C H E R    R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER

REPORT DATE: 05/24/04  
REPORT TIME: 09:10

REPORT TYPE: TIME ZONE LIST  
SYSTEM SERIAL NUMBER: 010006 - 00.0027

PAGE 1

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ZONE#	TIME OUT	TIME IN	IN USE	ZONE NAME
1	08:00	17:00	YES	FULL DAY USE
2	06:00	18:00	YES	WEEKEND USE
3	12:00	17:00	YES	SECOND HALF USE
4	08:00	12:00	YES	FIRST HALF USE
5	10:00	14:00	NO	MIDDLE OF DAY USE
25	DURATION	08:00	YES	LIMITED USE
26	DURATION	02:00	YES	VISITOR USE

---

TOTAL TIME ZONES = 7

END OF REPORT

***Date format (month/day/year) may vary, depending upon the appropriate format used in your country.***



***Sample KeyWatcher III Report  
(Alarm List)***

M O R S E    W A T C H M A N S  
K E Y W A T C H E R    R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER

REPORT DATE: 05/24/04  
REPORT TIME: 10:40

REPORT TYPE: ALARM LIST  
SYSTEM SERIAL NUMBER: 010006 - 00.0027

PAGE 1

BOX#	KEY#	SLOT#	TIME	DATE	ALARM MESSAGE	BY
1			10:16	01/24/03	ILLEGAL ENTRY	
			10:17	01/24/03	ILLEGAL ACCESS	
	7		10:36	01/24/03	OVERDUE KEY	J KELLY

END OF REPORT

***Date format (month/day/year) may vary, depending upon the appropriate format used in your country.***

**KeyWatcher Illuminated Manual**

**Sample KeyWatcher III Report  
(Audit Trail (User))**

M O R S E   W A T C H M A N S

K E Y W A T C H E R   R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER

REPORT DATE: 05/24/04  
REPORT TIME: 14:59

REPORT TYPE: AUDIT TRAIL (USER)  
FOR PERIOD: 05/01/2003 - 01/24/2003  
SYSTEM SERIAL NUMBER: 010006 - 00.0027

USER NAME: W Tucker  
USER NUMBER: 002

ALARM CODES: 1=OVERDUE KEY      2=ILLEGAL ENTRY      3=DOOR LEFT OPEN  
              4=ILLEGAL ACCESS    5=PROBLEM KEY        6=SHORTED KEY  
              7=INVALID KEY       8=BATTERY PROBLEM    9=KEY NOT TAKEN  
              10=BOX AC LOSS

PAGE 1

BOX#	KEY#	KEYNAME	TIME	DATE	ALARM/TRANSACTION
			14:52	01/17/03	USER LOGGED ON
1	1	SERVICE	14:53	01/17/03	OUT DUAL USER ACC
1	2	PRODUCTION	14:54	01/17/03	OUT TRIPLE USER ACC
			15:04	01/17/03	USER LOGGED ON
1	2	PRODUCTION	15:04	01/17/03	IN
1	1	SERVICE	15:04	01/17/03	IN
1	9	KEY0009	15:05	01/17/03	IN
			15:10	01/17/03	USER LOGGED ON
			09:27	01/24/03	USER LOGGED ON

END OF REPORT

*Date format (month/day/year) may vary, depending upon the appropriate format used in your country.*

## KeyWatcher *Illuminated* Manual

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### *Sample KeyWatcher III Report (Audit Trail (Key))*

M O R S E   W A T C H M A N S

K E Y W A T C H E R   R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER

REPORT DATE: 01/26/2003  
REPORT TIME: 15:36

REPORT TYPE: AUDIT TRAIL (KEY)  
FOR PERIOD: 01/01/2003 - 01/26/2003  
SYSTEM SERIAL NUMBER: 010006 - 00.0027

KEY #: 2  
KEYNAME: PRODUCTION

PAGE 1

TIME OUT	DATE OUT	TAKEN BY	TIME IN	DATE IN	IN BY
14:54	01/01/03	W Tucker J Granitto J Kelly	15:04	01/01/03	W Tucker
02:15*	01/22/03	J Kelly	15:27	01/22/03	J Kelly
08:39	01/26/03	ER M Luis	08:39	01/26/03	M Luis
14:53	01/26/03	W Tucker J Granitto J Kelly	15:04	01/26/03	J Granitto

END OF REPORT

*Date format (month/day/year) may vary, depending upon the appropriate format used in your country.*

***Sample KeyWatcher III Report  
(Keys In Use)***

M O R S E   W A T C H M A N S  
K E Y W A T C H E R   R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER

REPORT DATE: 01/31/2003  
REPORT TIME: 13:48

REPORT TYPE: KEYS IN USE  
SYSTEM SERIAL NUMBER: 010006 - 00.0027

PAGE 1

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KEY#	KEYNAME	TIME OUT	DATE OUT	TAKEN BY	O/DUE
5	Service	15:37	01/30/03	P Cantoni	NO
6	Production	15:12	01/30/03	R Graffam	NO

---

TOTAL KEYS OUT = 2

END OF REPORT

***Date format (month/day/year) may vary, depending upon the appropriate format used in your country.***

**Sample KeyWatcher III Report  
(Overdue Keys)**

M O R S E    W A T C H M A N S  
K E Y W A T C H E R    R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER

REPORT DATE: 01/31/2003  
REPORT TIME: 10:02

REPORT TYPE: OVERDUE  
SYSTEM SERIAL NUMBER: 010006 - 00.0027

PAGE 1

```
-----  
KEY#    KEYNAME                    TIME OUT    DATE OUT    TAKEN BY  
-----  
      2    PRODUCTION                    23:46      01/30/03    P Cantoni  
      7    MAINTENANCE                    08:51      01/31/03    R Graffam  
     17    KEY0017                         09:57      01/31/03    A O'Niel  
-----
```

TOTAL KEYS OVERDUE = 3

END OF REPORT

*Date format (month/day/year) may vary, depending upon the appropriate format used in your country.*

**Sample KeyWatcher III Report  
(Transaction Log (By Dates))**

M O R S E    W A T C H M A N S  
K E Y W A T C H E R    R E P O R T

COMPANY NAME: MORSE WATCHMANS  
BUILDING NAME: KEYWATCHER

REPORT DATE: 01/25/2003  
REPORT TIME: 13:51

REPORT TYPE: ALL TRANSACTIONS (BY DATES)  
FOR PERIOD: 01/23/2003 - 1/25/2003  
SYSTEM SERIAL NUMBER: 010006 - 00.0027

ALARM CODES: 1=OVERDUE KEY      2=ILLEGAL ENTRY      3=DOOR LEFT OPEN  
              4=ILLEGAL ACCESS    5=PROBLEM KEY        6=SHORTED KEY  
              7=INVALID KEY        8=BATTERY PROBLEM    9=KEY NOT TAKEN  
              10=BOX AC LOSS

PAGE 1

BOX#	KEY#	KEYNAME	TIME	DATE	EVENT	BY	ALARM/TRANSACTION
			02:14*	01/23/03		P Cantoni	USER LOGGED ON
1	1	KEY0001	02:15*	01/23/03	OUT	P Cantoni	
			22:53*	01/23/03		M Watchman	USER LOGGED ON
1	1	KEY0001	15:27	01/23/03	IN	M Watchman	
1	18		15:27	01/23/03	IN	L M Watchman	INVALID KEY
			15:05	01/24/03		M Watchman	USER LOGGED ON
1	6	KEY0006	15:12	01/24/03	OUT	M Watchman	
			15:12	01/24/03			MAIN AC LOSS
			15:13	01/24/03		M Watchman	USER LOGGED ON
1			00:35	01/25/03			BOX BATTERY LOW
1			01:14*	01/25/03			BOX BATTERY LOW
			06:55*	01/25/03		M Watchman	USER LOGGED ON
1	18		07:14*	01/25/03	OUT	L M Watchman	RMVD INVLD KEY

END OF REPORT

***Date format (month/day/year) may vary, depending upon the appropriate format used in your country.***

# SECTION

## XI

### SERVICE & MAINTENANCE

### **Forward**

Before handling any circuit boards or EPROM's, please read the section below for proper care and handling of these items.

This section has been designed to aid you in the servicing of your KeyWatcher Key Management System. It gives step by step instructions on the replacement of all the components for the system.

This section is not meant to aid you in the troubleshooting of your system. If you are experiencing a problem with your KeyWatcher, call Morse Watchmans Technical Support. A Morse technician will analyze your problem over the phone and determine which parts, if any, need to be replaced.

Once the technician has determined the parts that need to be replaced, you will be given a Return Materials Authorization Number (RMA #). The technician will then arrange to ship out the replacement parts. Upon receiving these parts, perform the repairs to your unit and then return the defective parts to Morse Watchmans. The RMA # must appear on the shipping label. If an RMA # is issued for a part and that part is not returned promptly, the full replacement price will be invoiced.

If you experience any problems servicing your KeyWatcher, call Technical Support and a technician will assist you.

### **Proper Care & Handling**

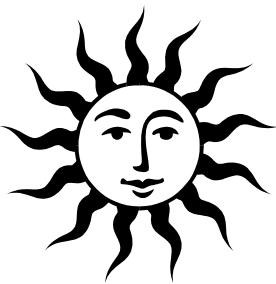
Prior to servicing your KeyWatcher you should generate any reports you may need. Also, if you do not have an updated backup of your KeyWatcher's database stored on a computer, this would be a good time to make one. For more information on backing up your database, see your Key-Pro III Software Manual.

All electronic parts for the KeyWatcher should be handled very carefully. Observe all precautions necessary when handling static sensitive components. Ground yourself when handling any of these circuit boards or EPROMs.

All parts shipped are tested prior to being sent and are packaged in a non-conductive / anti-static packaging to eliminate the danger of static damage. Please use the same packaging to return the defective boards to us. This will prevent further damage from occurring to the components on the boards.

Keep all parts away from moisture, direct sunlight, and static electricity. Applying power to a circuit with wet components will cause extensive damage to the equipment.

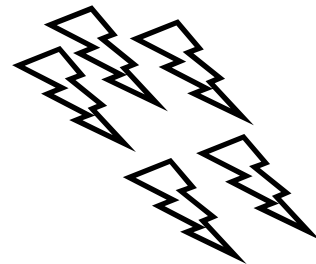
## **KEEP CIRCUIT BOARDS AWAY FROM:**



**DIRECT SUN**



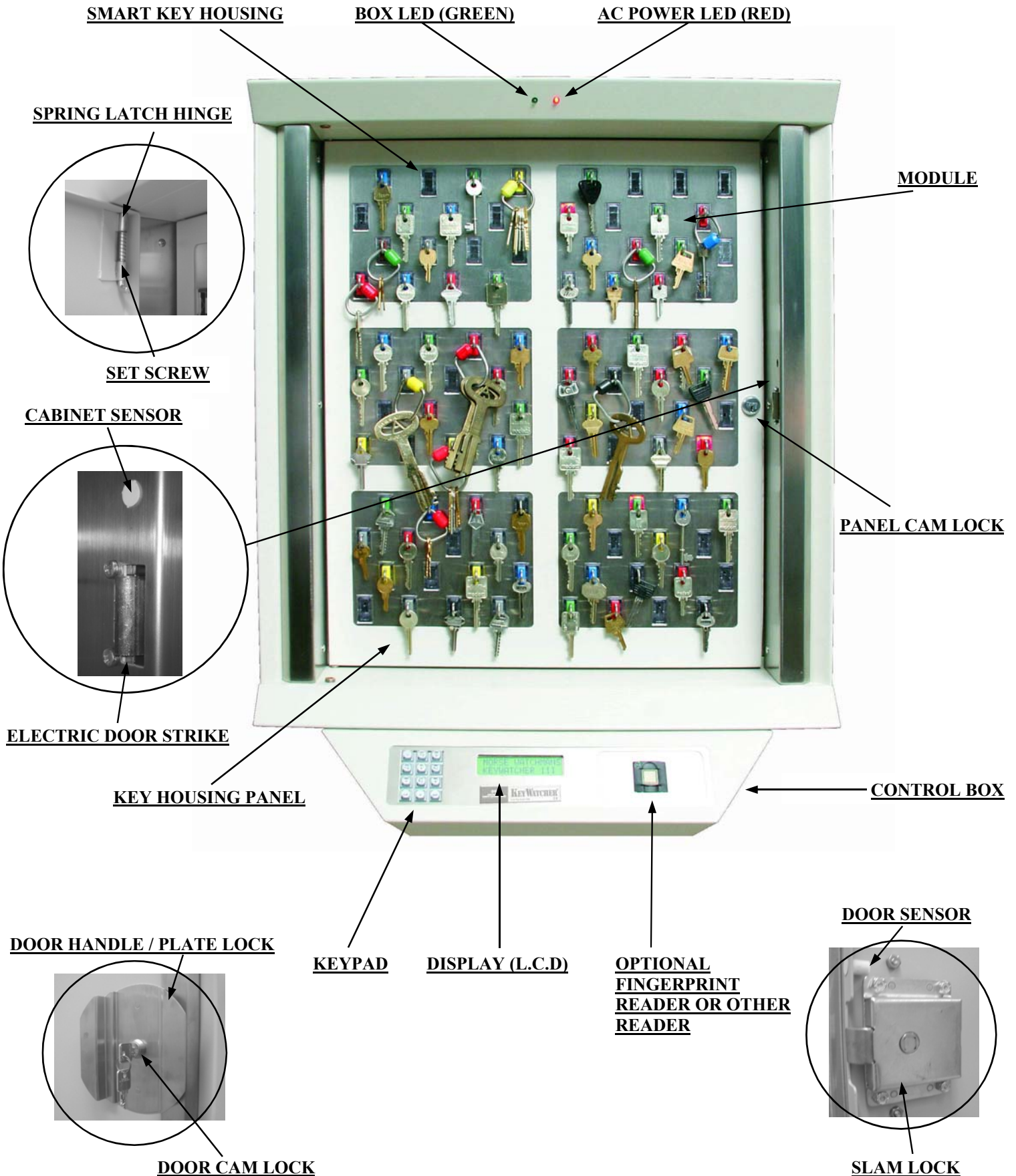
**WATER, RAIN &  
MOISTURE**



**STATIC  
ELECTRICITY**



# SYSTEM DIAGRAM



### **DISASSEMBLY - DOOR**

Some part replacement procedures require the door to be removed in order to service the KeyWatcher. If the door will need to be removed, this will be noted in the steps for the item being replaced. Follow the steps below to remove the door.

- 1) Open the door to the KeyWatcher using the supplied key.
- 2) Using the supplied hex key, remove the set screw from the Spring Latch Hinge. Keep the set screw in a safe place as it will need to be used again.
- 3) Pull down spring latch and remove door.



Hex Key Provided.

### **DISASSEMBLY - KEY HOUSING PANEL**

Some part replacement procedures require the key housing panel to be removed in order to service the KeyWatcher. If the panel will need to be removed, this will be noted in the steps for the item being replaced. Follow the steps below to remove the panel.

- 1) Remove all keys in the system.
- 2) Remove door according to DISASSEMBLY - DOOR instructions.
- 3) Using the supplied key, unlock the key housing panel lock and open the key housing panel.
- 4) Notice the gray ribbon cable coming from the Solenoid Driver Board to the Box Board and carefully disconnect it from the socket on the Box Board.
- 5) Pull down spring latch and remove key housing panel.

### **DISASSEMBLY - CONTROL BOX**

Some part replacement procedures require the control box to be removed in order to service the KeyWatcher. If the control box will need to be removed, this will be noted in the steps for the item being replaced. Follow the steps below to remove the control box.

- 1) Remove power according to REMOVING POWER instructions.
- 2) Open the door and the key housing panel.
- 3) Notice the gray ribbon cables coming from the keypad and display and carefully disconnect them from the keypad and display sockets. Also disconnect any other cables that are connected to devices such as a reader.
- 4) Remove the three screws located inside the box that are used to secure the control box in place.
- 5) Slide the control box to the left to release the tabs that hold the control box in place and remove the control box. Be careful not to damage the L.C.D, keypad, or other cables that are connected inside the control box. (You may need assistance holding the control box)

### **DISASSEMBLY - PANEL / REMOTE BOX**

If your system has a remote box (optional), it's panel may need to be removed in order to service the unit. Follow the steps below to remove the front panel of a remote box.

- 1) Remove power according to REMOVING POWER instructions.
- 2) Using the supplied tamper proof driver, remove the four tamper proof screws that hold the keypad/display panel in place. The panel can then be removed.
- 3) Disconnect the connector from the display and the keypad.

### **REMOVING POWER**

Some part replacement procedures require power to be removed in order to service the KeyWatcher. If the system will need to be powered down, this will be noted in the steps for the item being replaced. Follow the steps below to remove power from the system.

- 1) Open each door to the KeyWatcher using the supplied key.
- 2) Open each key housing panel using the supplied key.
- 3) Disconnect each power supply in the system and then disconnect the red lead from each battery located at the bottom of each cabinet.

### **DOOR CAM LOCK REPLACEMENT (KW-8228)**

Follow the steps below to replace the Door Lock:

- 1) Open the door to the KeyWatcher using the supplied key.
- 2) Remove the four nuts that hold the Slam Lock in place using a 3/8" driver tool.
- 3) Remove the Slam Lock.
- 4) Using a 7/8" wrench or an adjustable wrench, remove the nut that holds the Door CAM Lock in place.
- 5) Remove the old Door CAM Lock and Handle.
- 6) Place the new Door CAM Lock on the Handle and insert it through the hole in the Door. Be sure that the key hole is facing toward the bottom of the KeyWatcher.
- 7) Secure the new Door CAM Lock in place by tightening the nut using a 7/8" wrench or an adjustable wrench.
- 8) Place the Slam Lock in position and secure it in place with the four nuts.

### **SLAM LOCK REPLACEMENT (KW-8237)**

Follow the steps below to replace the Slam Lock:

- 1) Open the Door to the KeyWatcher using the supplied key.
- 2) Remove the four nuts that hold the Slam Lock in place using a 3/8" driver tool.
- 3) Remove the old Slam Lock.
- 4) Place the new Slam Lock in position and secure it in place with the four nuts.

### **PANEL CAM LOCK REPLACEMENT (KW-8280)**

Follow the steps below to replace the Panel Lock:

- 1) Remove key housing panel according to DISASSEMBLY - KEY HOUSING PANEL instructions.
- 2) Using a 7/16" wrench or an adjustable wrench, remove the nut and clip that locks the panel in place.
- 3) Using a 7/8" wrench or an adjustable wrench, remove the nut that holds the Panel CAM Lock in place.
- 4) Remove the old Panel CAM Lock.
- 5) Insert the new Panel CAM Lock through the hole in the Panel. Be sure that the key hole is facing toward the bottom of the KeyWatcher.
- 6) Secure the new Panel CAM Lock in place by tightening the nut using a 7/8" wrench or an adjustable wrench.
- 7) Place the clip that locks the panel in place on the Panel CAM Lock and secure it in place using the nut.
- 8) Reinstall the Panel.

### **L.C.D REPLACEMENT (KW-8238)**

Follow the steps below to replace the L.C.D:

- 1) Remove Control Box according to DISASSEMBLY - CONTROL BOX. If the L.C.D is in a remote box, disassemble the remote panel box according to the DISASSEMBLY - PANEL / REMOTE BOX instructions.
- 2) Remove the four screws that hold the L.C.D in place using a small philip head screwdriver.
- 3) Remove the clear plastic covering from the L.C.D glass of the new L.C.D.
- 4) Place the new L.C.D in position and secure it in place with the four screws.
- 5) Reconnect the L.C.D ribbon cable to the connector on the L.C.D.
- 6) Reinstall the Control Box or reassemble the remote box.
- 7) Follow the power up procedure to apply power to the KeyWatcher.

### **KEYPAD REPLACEMENT (KW-8221)**

Follow the steps below to replace the Keypad:

- 1) Remove Control Box according to DISASSEMBLY - CONTROL BOX. If the L.C.D is in a remote box, disassemble the remote panel box according to the DISASSEMBLY - PANEL / REMOTE BOX instructions.
- 2) Remove the four nuts (5/16") that hold the Keypad in place and remove the Keypad.
- 3) Place the new Keypad in position and secure it in place with the four nuts.
- 4) Reconnect the keypad ribbon cable to the connector on the Keypad.
- 5) Reinstall the Control Box or reassemble the remote box.
- 6) Follow the power up procedure to apply power to the KeyWatcher.

### **POWER SUPPLY REPLACEMENT (KW-8143)**

Follow the steps below to replace the Power Supply:

- 1) Open the door to the KeyWatcher using the supplied key.
- 2) Open the key housing panel using the supplied key.
- 3) Remove the two Wing Nuts from the Power Supply Bracket and remove it.
- 4) Remove the old Power Supply and replace it with the new Power Supply.
- 5) Place the Power Supply Bracket on the new Power Supply and secure it in place with the two Wing Nuts.
- 6) Close the panel and lock it in place.

### **MODULE REPLACEMENT**

Follow the steps below to replace a Module:

- 1) Remove key housing panel according to DISASSEMBLY - KEY HOUSING PANEL instructions.
- 2) Locate the Module that needs to be replaced. Verify that the new Module is the same Module Number as the one being replaced. This is very important because we supply many different Modules. The Module will have a check mark on the back indicating the Module number.
- 3) Once you have located the Module that needs to be replaced, remove the ribbon cable and label it so you know whereto return it after the Module is replaced.
- 4) Remove the eight nuts that hold the Module in place with a 1/4" driver tool. The Module can then be removed. Pulling the bottom of the Module out first does make it easier to remove.
- 5) Mount the new Module using the eight nuts.
- 6) Reconnect the ribbon cable.
- 7) Reinstall the Panel.

### **POWER MANAGEMENT BOARD (G5116) REPLACEMENT (KW-8253)**

Follow the steps below to replace the Power Management Board:

- 1) Remove key housing panel according to DISASSEMBLY - KEY HOUSING PANEL instructions.
- 2) Remove power according to REMOVING POWER instructions.
- 3) Remove all the wires connected to the Power Management Board. Be sure to label these wires so you know exactly where to return them after the board has been replaced. The J3 and J6 wires can be removed using a small flathead screwdriver. The J1, J2, and J5 connectors can be pulled off.
- 4) Using a small philip head screwdriver, remove the four screws that hold the Power Management Board to the back wall of the box. The Power Management Board can then be removed by carefully pulling it to the left, allowing the J4 connector to disconnect from the J3 connector on the KeyWatcher Box Board.
- 5) Mount the new Power Management Board allowing J4 to connect with J3 on the KeyWatcher Box Board. The screw mounts on the box will then line up allowing the board to be secured in place with the four screws.
- 6) Reconnect the wires as they were on the Power Management Board.
- 7) Reinstall the panel.
- 8) Follow the power up procedure to apply power to the KeyWatcher.

### **BOX BOARD (G5141) REPLACEMENT**

Follow the steps below to replace the KeyWatcher III BOX Board:

- 1) Remove key housing panel according to DISASSEMBLY - KEY HOUSING PANEL instructions.
- 2) Remove power according to REMOVING POWER instructions.
- 3) Remove the wires connected to the KeyWatcher BOX Board. Be sure to label these wires so you know exactly where to return them after the board has been replaced.
- 4) Using a small phillips head screwdriver, remove the six screws that hold the KeyWatcher BOX Board to the back wall of the box. The KeyWatcher BOX Board can then be removed by carefully pulling it to the right, allowing the J3 connector to disconnect from the J4 connector on the Power Management Board.
- 5) Mount the new KeyWatcher BOX Board allowing J3 to connect with J4 on the Power Management Board. The screw mounts on the Box will then line up allowing the board to be secured in place with the six screws.
- 6) Reconnect all the wires that were removed into their appropriate sockets.
- 7) Reinstall the Panel.
- 8) Follow the power up procedure to apply power to the KeyWatcher.

### **KEYWATCHER III CPU BOARD (G5180) REPLACEMENT**

Follow the steps below to replace the KeyWatcher III CPU Board:

- 1) Remove key housing panel according to DISASSEMBLY - KEY HOUSING PANEL instructions.
- 2) Remove power according to REMOVING POWER instructions.
- 3) Remove the wires connected to the KeyWatcher III Master CPU Board. Be sure to label these wires so you know exactly where to return them after the board has been replaced.
- 4) Using a small phillips head screwdriver, remove the six screws that hold the KeyWatcher III Master CPU Board to the back wall of the box. The KeyWatcher III Master CPU Board can then be removed.
- 5) Mount the new KeyWatcher III Master CPU and secure it in place with the six screws.
- 6) Reconnect all the wires that were removed into their appropriate sockets.
- 7) Reinstall the Panel.
- 8) Follow the power up procedure to apply power to the KeyWatcher.

### **BOX BOARD EPROM REPLACEMENT**

Follow the steps below to replace the KeyWatcher Box Board EPROM:

- 1) Remove power according to REMOVING POWER instructions. Keep door and key housing panel open.
- 2) Locate the EPROM that needs to be replaced.
- 3) Using a pair of tweezers or a small flat head screwdriver, remove the EPROM that needs to be replaced from its socket. This is accomplished by slipping one side of the tweezers between the EPROM and its socket and then slightly pulling the EPROM up. After the EPROM is slightly lifted on one side, switch the tweezers to the opposite side and slightly pull the EPROM up. Repeat this procedure until the EPROM is removed. This process insures that the pins on the EPROM are not broken.
- 4) Insert the new EPROM into the socket. Be sure to observe that it is inserted in the proper direction. There is a notch on one end of both the socket and the EPROM. These notches should face the same direction.
- 5) Follow the power up procedure to apply power to the KeyWatcher.

### **RESETTING THE KEYWATCHER**

Follow the steps below to reset the KeyWatcher Illuminated:

**Procedure 1:** (For the location of Reset Button, see the diagram on page 168.)

This procedure should not lose any programmed information unless the database is corrupt.

- 1) Open each door to the KeyWatcher using the supplied key.
- 2) Open each key housing panel using the supplied key.
- 3) Notice the button located next to the Power Connector and the RAM Battery on the KeyWatcher III Master CPU Board. Press this button and hold it down for at least 3 seconds and the system will reset when the button is released. If the correct number of boxes were not found, be sure that your connections to each box are correct and reset the system again.
- 4) If this procedure failed to reset the KeyWatcher or did not resolve the problem encountered, try resetting the system using the second procedure.

**Procedure 2:**

This procedure will lose all programmed information and transactions.

- 1) Remove power according to REMOVING POWER instructions. Keep door and key housing panel open.
- 2) Remove the RAM Battery Jumper located next to the RAM Battery on the KeyWatcher III Master CPU Board. This jumper should be kept off for a few minutes.
- 3) Remove any external devices, such as a printer, computer, etc., that may be connected to the KeyWatcher.
- 4) Follow the power up procedure to apply power to the KeyWatcher. Be sure to reconnect the RAM Battery Jumper prior to powering the system.

**ELECTRIC DOOR STRIKE REPLACEMENT (KW-8236)**

Follow the steps below to replace the Electric Door Strike:

- 1) Remove power according to REMOVING POWER instructions. Keep door and key housing panel open.
- 2) The two wires coming from the Electric Door Strike need to be removed from the J2 connector on the KeyWatcher Box Board. The wires in the J2 connector are removed by loosening the screws with a small flat head screwdriver.
- 3) Remove the 2 screws that hold the door latch to the case using a philip screwdriver. The latch will now move freely in its slot. Remove the latch entirely
- 4) Place the new door latch in position and secure it in place with the two screws. Do not remove the tape on the door latch until it is installed.
- 5) Reconnect the wires from the new Electric Door Strike to the J2 connector on the KeyWatcher Box Board.
- 6) Follow the power up procedure to apply power to the KeyWatcher.

**BATTERY REPLACEMENT (KW-8229)**

Follow the steps below to replace the Battery:

- 1) Open the door to the KeyWatcher using the supplied key.
- 2) Open the key housing panel using the supplied key.
- 3) Disconnect both leads from the Battery, be sure not to let them touch anything.
- 4) Remove the three Wing Nuts from the Battery Bracket and remove it.
- 5) Remove the old Battery and replace it with the new Battery.
- 6) Place the Battery Bracket on the new Battery and secure it in place with the three Wing Nuts.
- 7) Reconnect the leads to the Battery making sure the black lead is connected to the negative side and the red is connected to the positive side.
- 8) Reinstall the Panel.



### **CABINET SENSOR REPLACEMENT (KW-8370)**

Follow the steps below to replace the Cabinet Sensor:

- 1) Remove power according to REMOVING POWER instructions. Keep door and key housing panel open.
- 2) The two wires coming from the Cabinet Sensor need to be removed from the J2 connector on the KeyWatcher Box Board. The wires in the J2 connector are removed by loosening the screws with a small flat head screwdriver.
- 3) Remove the old Cabinet Sensor using a small tap and hammer. Slightly tap the center of the Cabinet Sensor until it pushes into the cabinet.
- 4) Insert the wires from the new Cabinet Sensor through the hole and push the Cabinet Sensor until it is secure in place.
- 5) Reconnect the wires from the new Cabinet Sensor to the J2 connector on the KeyWatcher Box Board.
- 6) Follow the power up procedure to apply power to the KeyWatcher.

### **DOOR SENSOR REPLACEMENT (KW-8371)**

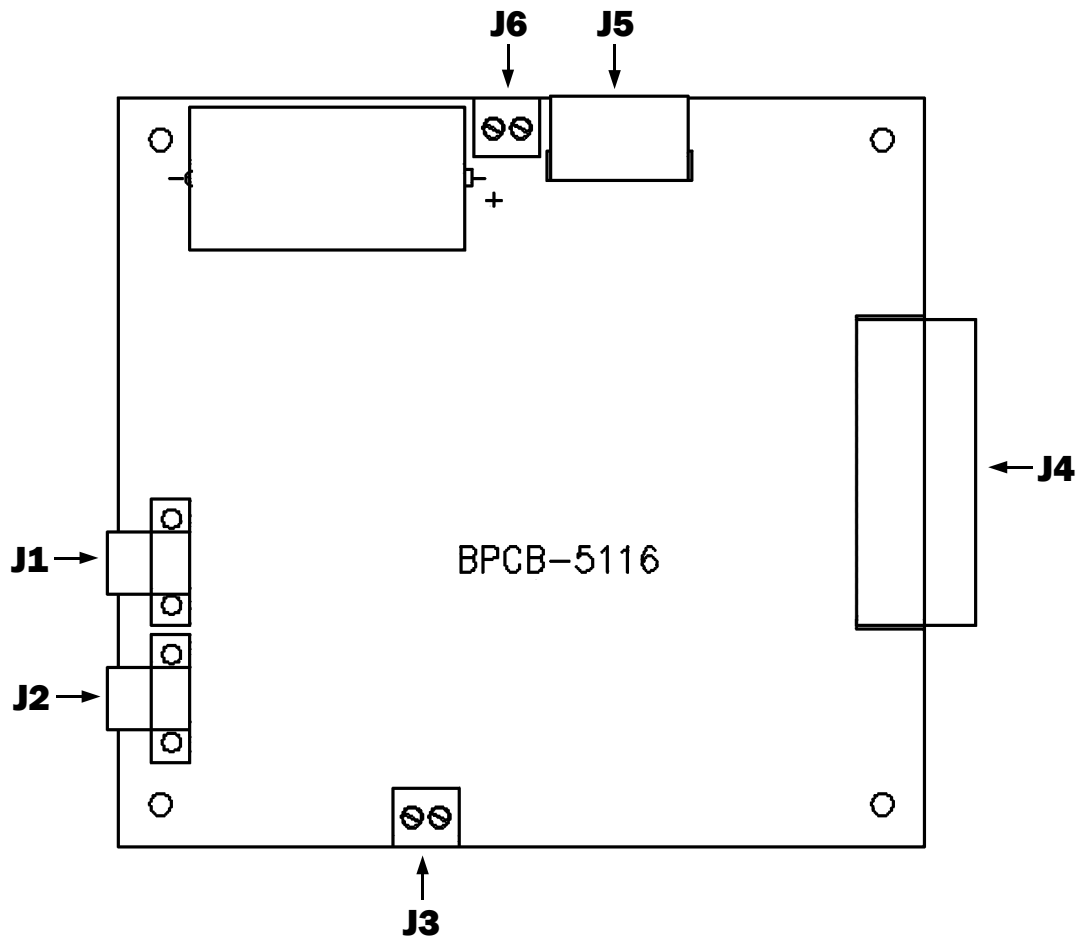
Follow the steps below to replace the Door Sensor:

- 1) Open the door to the KeyWatcher using the supplied key.
- 2) Remove the adhesive holding the Door Sensor in place and push the sensor out of the hole.
- 3) Push the new Door Sensor into the hole until it is secure in place. An adhesive should be used to hold the sensor in place. Do not use a glue of any type.

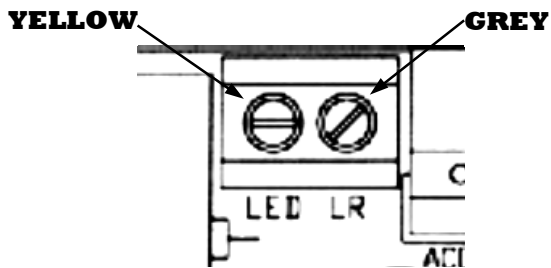
### **RAM BATTERY REPLACEMENT (KW-8281)**

Follow the steps below to replace the RAM Battery:

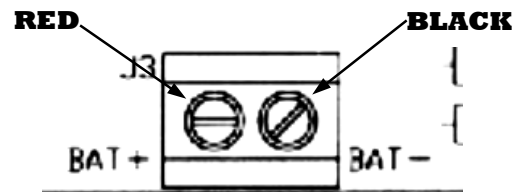
- 1) Remove power according to REMOVING POWER instructions. Keep door and key housing panel open.
- 2) Remove the RAM Battery Jumper located next to the RAM Battery on the KeyWatcher III Master CPU Board. This jumper should be kept off for a few minutes.
- 3) The RAM battery is located on the KeyWatcher III Master Board in the lower left corner. Cut the strap that holds the RAM battery in place and remove the old RAM battery.
- 4) Insert the new RAM Battery making sure the positive side is inserted as labeled on the RAM Battery socket.  
**DO NOT INSERT THE RAM BATTERY BACKWARDS, IT WILL DAMAGE THE BOARD**
- 7) Connect the RAM Battery Jumper labeled on the KeyWatcher III SMD Board.
- 8) Reinstall the Panel.
- 9) Follow the power up procedure to apply power to the KeyWatcher.



POWER MANAGEMENT BOARD CONNECTIONS	
J1	POWER TO NEXT BOX / NOT USED
J2	POWER SUPPLY / POWER TO NEXT BOX / NOT USED
J3	BATTERY
J4	KEYWATCHER BOX BOARD
J5	POWER
J6	AC POWER LED

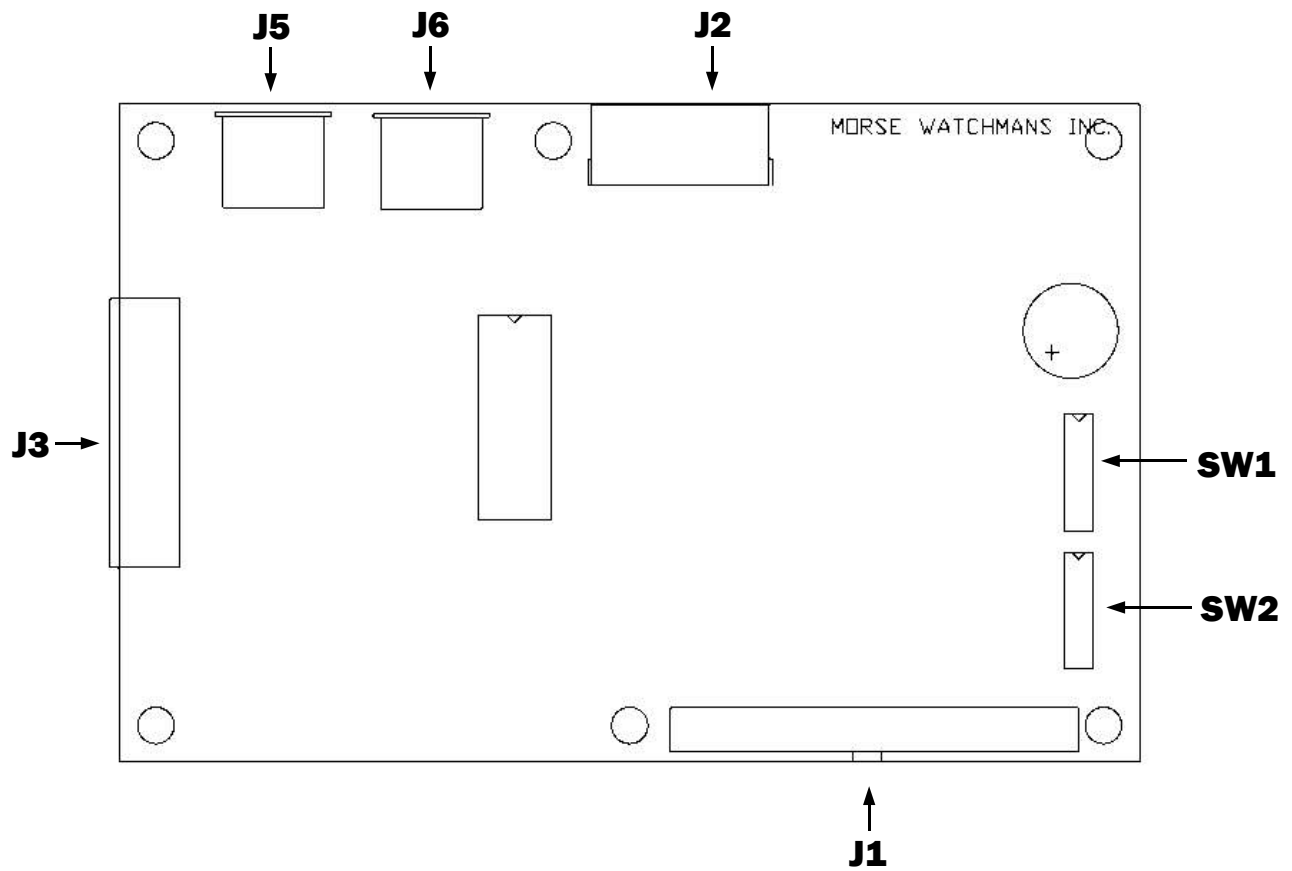


**EXPANDED VIEW J6**

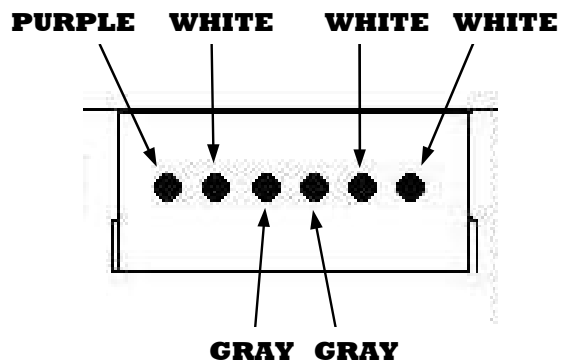


**EXPANDED VIEW J3**

**POWER MANAGEMENT BOARD - G5116**



KEYWATCHER BOX BOARD CONNECTIONS	
J1	SOLENOID DRIVER BOARD
J3	POWER MANAGEMENT BOARD
J2	BOX LED, ELECTRIC DOOR STRIKE, CABINET SENSOR
J5	COMMUNICATION CABLE
J6	COMMUNICATION CABLE
SW1	DETERMINES BOX # & MODULE SETTINGS
SW2	DETERMINES MODULE SETTINGS

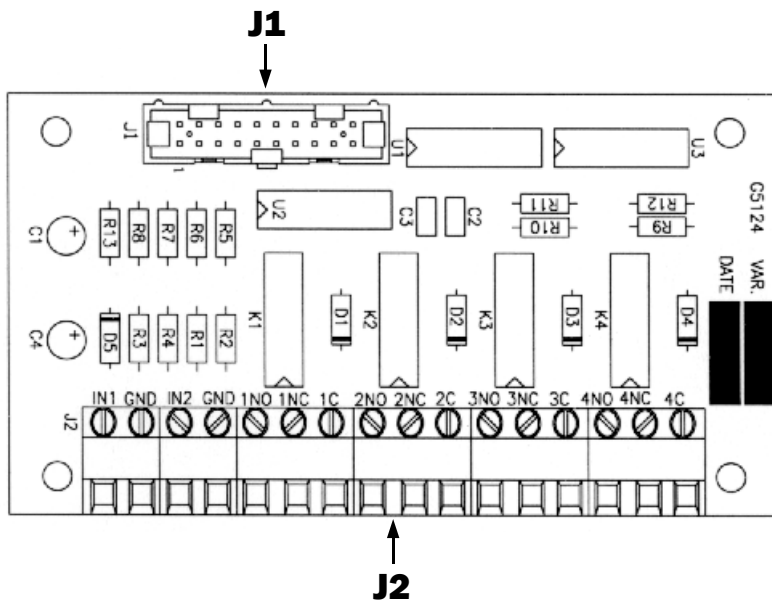


**EXPANDED VIEW J2**

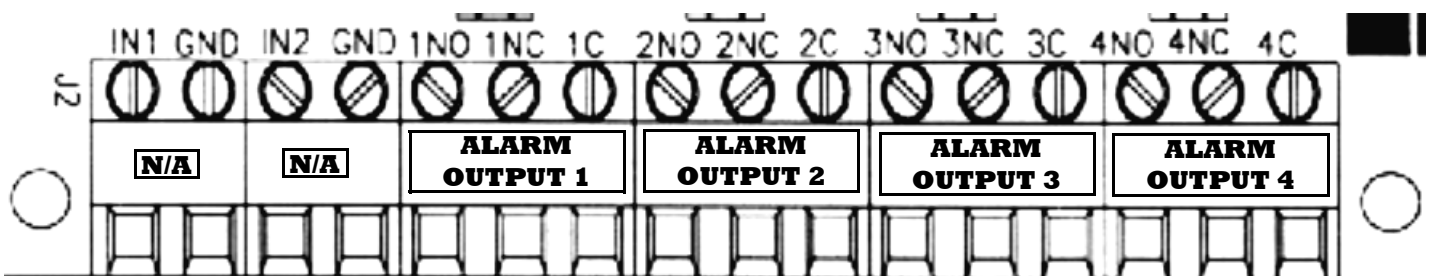
Note: Wire colors may vary.

**KEYWATCHER BOX  
BOARD - G5141**





RELAY OPTION BOARD CONNECTIONS	
J1	KEYWATCHER III MASTER BOARD (28)
J2	RELAY INPUTS / OUTPUTS



**EXPANDED VIEW J2**

N/A = NOT APPLICABLE

Alarm Type	Alarm Output Triggered	Alarm Type	Alarm Output Triggered
Overdue Key	1	AC Power loss (Slave)	3
Illegal Entry	4	Illegal Access	2
Door Left Open	3	Problem Key	2
AC Power loss (Master)	3	Return Violation	1

**Note:** If your system was supplied with the optional Duress alarm output, the Duress alarm will be triggered on output 4 and the Illegal Entry alarm will be triggered on output 2.

**Note:** The above table does not apply to any special configuration systems.

**RELAY OPTION BOARD (G5124)**

## RELAY INPUT CONNECTION

The KeyWatcher allows a momentary closure to enable the use of the keypad. This closure is initiated by an access control system in the facility. Pins 8 & 9 on the Card Reader / Relay Input Connection (located on the KeyWatcher III Master CPU Board) are used to connect your access control system to the KeyWatcher. To install your device to the Relay Input, follow these steps:

### Connecting Device to Relay Input

- 1) Remove power according to REMOVING POWER instructions. Keep door and key housing panel open.
- 2) Connect the normally open dry contact from your device to pin 8 & 9 on the Card Reader / Relay Input Connection on the KeyWatcher III Master CPU Board. Pin 8 is the closure relay and pin 9 is ground. These connections are labeled on the board.
- 3) Follow the power up procedure to apply power to the KeyWatcher.
- 4) The Relay Input will need to be enabled. See the Relay Input Enable on page 23.

### EXPANDED VIEW OF CARD READER / RELAY INPUT CONNECTION

RELAY INPUT CONNECTIONS								
GND	REL	DAL	GND	CRD VAL	D1/ STRBE	D0/ DATA	5V	13V
⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
9	8	7	6	5	4	3	2	1
PIN #				LINE				
9				GROUND				
8				RELAY				

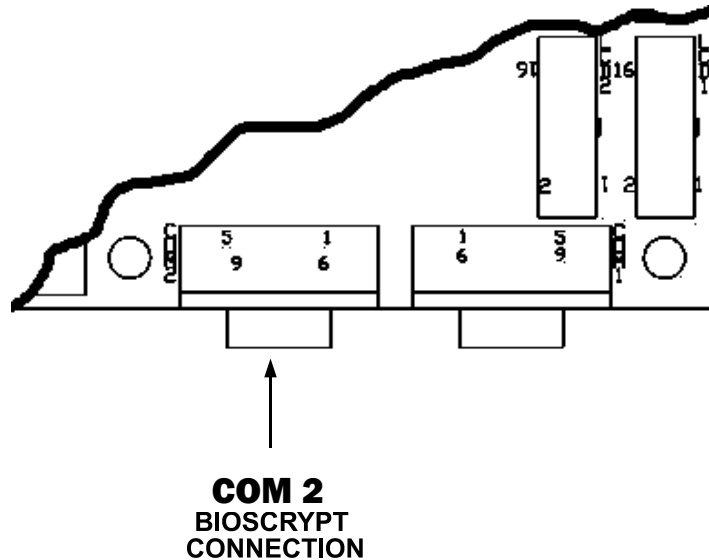
## BIOSCRYPT READER CONNECTION (OPTIONAL)

The KeyWatcher allows a Bioscrypt Reader to be connected to the COM 2 port located on the KeyWatcher III Master CPU Board. To install communication wire from the Bioscrypt Reader to the COM 2 port, follow these steps:

### Connecting Bioscrypt Reader to the KeyWatcher III Master CPU Board

- 1) Remove power according to REMOVING POWER instructions. Keep door and key housing panel open.
- 2) Connect the communication cable from the Bioscrypt Reader to the COM 2 port on the KeyWatcher III Master CPU Board.
- 3) Follow the power up procedure to apply power to the KeyWatcher.
- 4) The Bioscrypt Reader will need to be enabled. See the Bio Fingerprint Enable on page 32.

### EXPANDED VIEW OF KEYWATCHER III MASTER CPU BOARD G5180



## CARD READER CONNECTIONS

(OPTIONAL)

The KeyWatcher allows a Card Reader to be connected to the Card Reader / Relay Input Connection. In order for this feature to function properly, the system was be preset by the manufacturer to operate with the Card Reader to be installed. To install a Card Reader to the Card Reader / Relay Input Connection, follow the diagrams below.

### EXPANDED VIEW OF CARD READER / RELAY INPUT CONNECTION

WEIGAND (GENERIC)										
GND	REL	DAL	GND	CRD VAL	D1/STRBE	D0/DATA	5V	13V		
⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
9	8	7	6	5	4	3	2	1		
PIN #					LINE					
6					GROUND					
4					DATA1					
3					DATA0					
2					+5 VOLTS					
1					+13 VOLTS					

MORSE CARD READER (MAGTEK)										
GND	REL	DAL	GND	CRD VAL	D1/STRBE	D0/DATA	5V	13V		
⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
9	8	7	6	5	4	3	2	1		
PIN #					WIRE COLOR					
6					BROWN					
5					ORANGE					
4					GREEN					
3					YELLOW					
2					RED					

HID READER										
GND	REL	DAL	GND	CRD VAL	D1/STRBE	D0/DATA	5V	13V		
⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
9	8	7	6	5	4	3	2	1		
PIN #					WIRE COLOR					
6					BLACK					
4					WHITE					
3					GREEN					
2					RED					

MAGNETIC STRIPE (CLOCK/STROBE & DATA) (GENERIC)										
GND	REL	DAL	GND	CRD VAL	D1/STRBE	D0/DATA	5V	13V		
⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
9	8	7	6	5	4	3	2	1		
PIN #					LINE					
6					GROUND					
5					CRD VAL					
4					STRBE					
3					DATA					
2					+5 VOLTS					
1					+13 VOLTS					

IBC READER										
GND	REL	DAL	GND	CRD VAL	D1/STRBE	D0/DATA	5V	13V		
⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
9	8	7	6	5	4	3	2	1		
PIN #					WIRE COLOR					
6					BLUE					
5					GREEN					
4					WHITE					
3					ORANGE					
2					RED					

HAND READER										
GND	REL	DAL	GND	CRD VAL	D1/STRBE	D0/DATA	5V	13V		
⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
9	8	7	6	5	4	3	2	1		
PIN #					WIRE COLOR					
6					BLACK					
4					WHITE					
3					GREEN					



## MAINTENANCE

The following maintenance procedures should be performed on a monthly basis.

The following equipment will be needed:

- 1) Cotton swabs.
- 2) Rubbing alcohol.

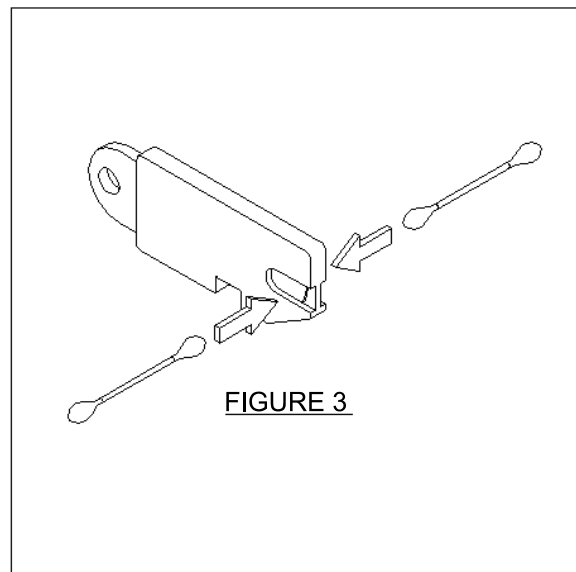
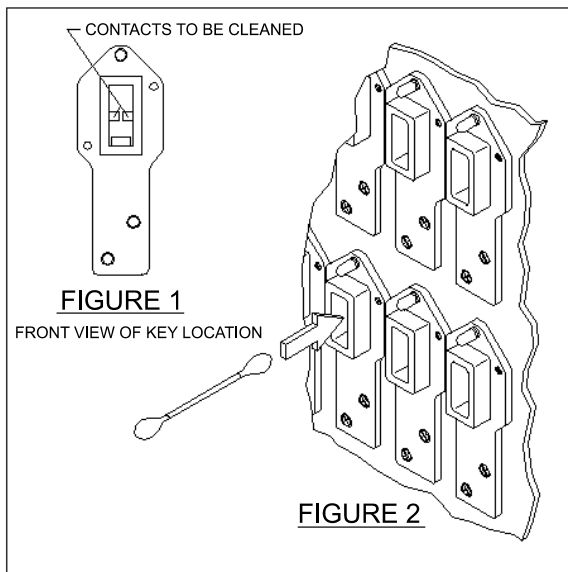
All of the smart keys will need to be removed, you may remove one at a time or all at once.

Inside each key location are two contacts (Figure 1), these contacts may accumulate dirt from the smart keys and they will need to be cleaned periodically. To clean the contacts follow these steps.

- 1) Slightly dampen a cotton swab with rubbing alcohol, insert the cotton swab into the location (Figure 2) and clean any dirt from the contacts that may have accumulated.
- 2) Using a dry cotton swab wipe away any excess dirt or moisture that may still be on the contacts.
- 3) Repeat this procedure for each location in your KeyWatcher.

Before returning the smart keys to the key locations, each smart key will also need to be cleaned. To clean the smart keys follow these steps.

- 1) Slightly dampen a cotton swab with rubbing alcohol, rub the cotton swab against the smart chip (Figure 3) cleaning any dirt that may have accumulated.
- 2) Using a dry cotton swab wipe away any excess dirt or moisture that may still be on the smart chip.
- 3) Repeat this procedure for each smart key.



# MWI LIMITED WARRANTY

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Morse Watchmans, Inc. (MWI) warrants each KeyWatcher system to be free from defects in material and workmanship, under normal use, and to service, for 2 years after the date of shipment to the original purchaser subject to terms and conditions stated below:

- 1) WARRANTOR: Morse Watchmans, Inc., 2 Morse Rd., Oxford, CT, 06478.
- 2) PARTIES TO WHOM WARRANTY IS EXTENDED: To the original purchaser only.
- 3) PARTS COVERED: All products and parts manufactured by or for MWI except as provided below.
- 4) REMEDY: If, within the warranty period, any product or part covered by this warranty proves to be defective in material and/or workmanship, then MWI shall, at its option, repair or replace the defective product or part.
- 5) PROCEDURE FOR OBTAINING PERFORMANCE UNDER THIS WARRANTY: In order to obtain performance, the original purchaser must promptly notify MWI of the defect, at this time MWI will determine what parts, if any, are defective. MWI will then send any replacement parts under an RMA # (Return Materials Authorization#) which is necessary to return any defective parts to MWI. **All transportation costs to and from MWI will be at the expense of the original purchaser.** ANY CLAIM MADE UNDER THIS WARRANTY MUST BE ACCOMPANIED BY PROOF OF ORIGINAL SHIPMENT DATE.
- 6) SOLE REMEDY: The remedy and liability for breach of any warranty, whether express, implied, or otherwise, is set forth above and is the sole and exclusive remedy and the limit of liability for any such breach.
- 7) DESIGN CHANGES: MWI reserves the right to make changes in the design or material of the system of any product or part without incurring any obligation to incorporate such changes in any system, product, or part previously manufactured or advertised.
- 8) EXCLUSIONS: This warranty does not extend to any defect due to the negligence of others, failure to operate or maintain the system or any product or part in accordance with the operating and maintenance instructions furnished with each system, unreasonable use, accidents, alterations, ordinary wear and tear, or the use of unauthorized or non-standardized parts or accessories.

THERE ARE NO WARRANTIES, EXPRESS, IMPLIED, OR OTHERWISE, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE, WHICH EXTEND BEYOND THIS WARRANTY. MWI SHALL NOT BE RESPONSIBLE FOR LOSS OF USE OF ANY SYSTEM, LOSS OF TIME, INCONVENIENCE, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES WITH RESPECT TO BUSINESS OR PROPERTY, WHETHER AS A RESULT OF BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY IN SORT, OR OTHERWISE.
- 9) NO VARIATIONS OF TERMS: No person has the authority to orally, in writing, or in any other way vary the terms, conditions, or exclusions of this warranty or to make any express warranties other than those set forth above.

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