



ECS 25
User Manual

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Access Controls International
Division of Access Northern Security Inc.
303 West Main Street
Freehold, New Jersey 07728

National: 1-888-810-6060
International: 1-732-462-7236
Fax: 1-732-462-0511
E-mail: ECS@ACIsecurity.com

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Section 1 – General Information

The *ECS 25* is a single door, stand alone access control system which uses ComKey user credentials and features on-site programming through the ComKey Reader LED.

The model 25 requires 12 VDC power supplied by a plug-in DC transformer or a power supply/charger if a back-up battery is utilized. Output control is accomplished with one form C relay contact configured for latching or momentary activation.

The *ECS-25* system kit includes the following standard equipment:

- ◆ An *ECS-25* Controller Board mounted in a heavy duty steel enclosure; Also mounted in the enclosure is a 12 volt DC power supply/charger with a 4 ampere hour back up battery.
- ◆ One (1) ComKey Reader;
- ◆ One (1) Request-To-Exit push button station;
- ◆ Ten (10) ComKeys Credentials;
- ◆ Two (2) ComKeys for use as Program Keys;
- ◆ Fifty (50) feet of Six (6) conductor flat cable hook up wire (for connection of the reader to the controller board);
- ◆ Two (2) RJ-12 connectors, one (1) crimping tool, mounting screws, installation manual and user manual.

You may also request optional equipment, including:

- ◆ Additional ComKey reader (if free egress is not desired);
- ◆ Additional ComKeys (the *ECS-25* supports up to 25 users);
- ◆ Power Supply/Charger with 7 ampere hour battery back up;
- ◆ Request-To-Exit Motion Detector or Exit Release Push Bar;
- ◆ Magnetic Door Locks or Electric Strikes

Section 2 – Features

The *ECS-25* controls up to 25 users.

Access is controlled by communication between a site reader and a site controller, upon presentation of a valid access ComKey credential.

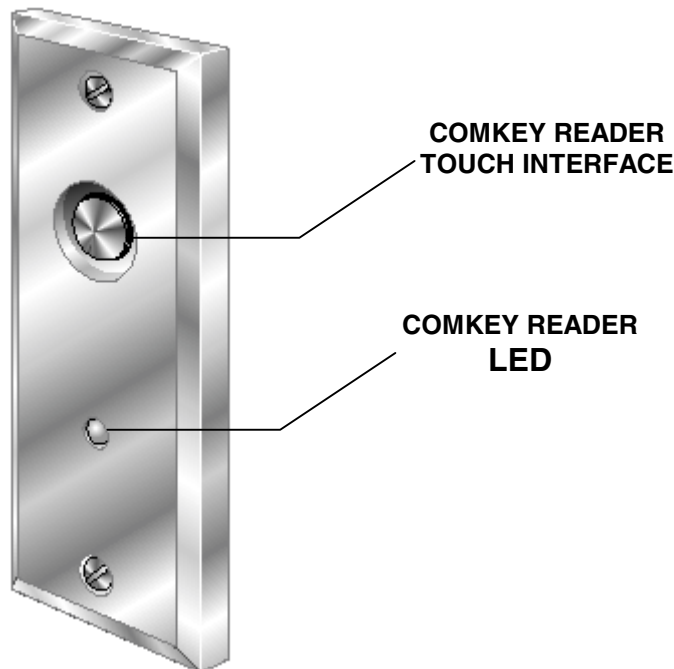
The *ECS-25* communicates through a link between the controller board and the ComKey Reader. When a valid ComKey is presented at the reader, it is identified by the reader and validated by the controller, which will activate a dry contact relay. The controller then sends a GREEN feedback LED signal to the reader. (An invalid ComKey will result in a RED signal)

A normally closed circuit connection is provided on the controller board for a Request to Exit or Emergency Lock Release input.

Section 3 - Programming The Controller

The ECS-25 is very simple to program. All programming is accomplished using the tri-color LED on the connected ComKey Reader. The solid LED colors reflect the various programming functions and the blinking LED indicates ComKey assignment location.

All programming is initiated by first touching a valid Program ComKey.



Assigning a Program ComKey

A Program ComKey must be assigned prior to operating the system.

The **FIRST** ComKey touched to the Reader after initially powering up the system becomes a Program ComKey. This ComKey should be clearly labeled and kept in a secure place. The system allows a total of two (2) program keys, and it is recommended that a back-up be created.

This Program ComKey can only be used for programming.

IT CANNOT BE USED FOR ACCESS.

Setting Relay Mode

The ECS 25 controller comes with a factory default relay setting of Momentary mode.

Momentary Mode means that upon presentation of a valid ComKey, the door lock will disengage for the period established as the relay time (1 second [default] to 4 minutes) and will then re-engage to secure the door. The door can then only be re-opened by another valid ComKey or a free egress device.

Latching Mode means that the lock will disengage upon the presentation of a valid ComKey and the door will remain unlocked indefinitely, until a valid ComKey is presented again. This allows the administrator to keep a door unlocked to allow for heavy, unencumbered traffic (moving furniture, transferring inventory, etc.) without the door being kept physically open. When the activity is complete the door can be locked and the relay mode can be set back to momentary.

The relay mode can be toggled between Momentary and Latching.

To toggle the Relay Mode:

1. Remove power from the system
(The ECS-25 uses non-volatile memory so the removal of power will not affect the user database inside the controller)
2. Simultaneously re-apply power to the system while holding a User ComKey to the Reader
3. Remove the User ComKey (The relay mode has now been toggled)

Programming Modes

When the system is in Normal operating mode, either momentary or latching, the ComKey Reader LED will be a **blinking** RED.

When the system is in Programming Mode (Upon presentation of a Program ComKey), the color of the ComKey Reader LED will identify the Programming function. The LED colors and their related function are as follows:

- | | |
|---|-----------------------------|
| ◆ Flashing RED LED | Normal Operation |
| ◆ 1 st Solid AMBER LED | Add a New User ComKey |
| ◆ 1 st Solid RED LED | Delete a User ComKey |
| ◆ 1 st Solid GREEN LED | Add a second Program ComKey |
| ◆ 2 nd Solid AMBER LED | Set Relay Time |
| ◆ 2 nd Solid RED LED***
programming | Clear controller database |

When a Program Key is held to the Reader, the Programming mode LED colors will scroll in the order listed above. The LED will change color at approximately five (5) second intervals.

*****CAUTION – DO NOT scroll to the 2nd Solid RED LED unless you want to clear the database of all users. If this happens you will need to re-enroll all users.**

(Note: If you do scroll to the second solid RED LED you would need to hold the Program ComKey to the reader for approximately 3-5 seconds before the clearing function would occur. If you accidentally scroll to the 2nd solid RED LED and quickly release the Program ComKey, you will not clear the database, but you will have set the relay time to the factory default setting of 1 second.)

ADD A NEW COMKEY

Each individual authorized to open the door must have a ComKey whose embedded personal identification number (PIN) has been programmed into the controller. This is accomplished by setting the controller program mode to accept the input of a new or incremental PIN and then presenting the ComKey in the appropriate manner to be read by the controller. The adding of ComKey PIN's is referred to as enrollment.

The ECS-25 can control up to 25 individual users (excluding Program ComKeys). There are 25 available slots, which are empty spaces in the controller's database, where ComKey PIN's can be stored.

IMPORTANT: **The ECS-25 assigns an internal slot location for each ComKey enrolled. The location is identified by the number of GREEN flashes on the ComKey Reader LED, at the time of enrollment. The system does not identify the name of the individual assigned to that ComKey location.**

Therefore, when adding new ComKeys it is very important to:

- **Carefully observe the number of Green flashes of the LED for each new ComKey added; and**
- **Keep a log book or other record of the slot number and the individual assigned to it.**

As the ECS-25 allows for a specific, individual ComKey to be removed/deleted from the database by Slot number, without the need to have the actual ComKey physically available, accurate record keeping of the assigned slot numbers will be essential for this feature to be utilized.

A ComKey may only be entered into the database one time. You cannot accidentally enter a ComKey into two or more different slots. If you inadvertently attempt to add a ComKey already in the controller, the system will not accept it and the LED on the controller board will flash RED

ADD A NEW COMKEY (continued)To Add a New ComKey

1. Enter Programming Mode by Touching and Holding a Program ComKey to the ComKey Reader
2. Wait for the **FIRST SOLID AMBER LED** and remove the Program ComKey
3. **Touch and Remove** the new ComKey being added. The LED will blink GREEN from 1 to 25 times, representing the slot location for that ComKey in the controller's database
4. The LED will return to SOLID AMBER indicating the controller is ready to add another ComKey
5. **Touch and Remove** additional new ComKeys, as desired.
6. To exit back to Normal Operating mode, Touch any ComKey already programmed into the system or wait approximately 20 seconds and the system will return automatically to normal mode (indicated by a Flashing RED LED)

DELETE A COMKEY

ComKeys can be removed/deleted from the controller's database by an administrator regardless of whether the ComKey to be deleted is physically available or not, and without affecting the other users within the database. **To delete a ComKey without it being physically available, you must know the exact slot number to which it was assigned.**

To Delete A ComKey (without the physical key)

1. Enter Programming Mode by Touching and Holding a Program ComKey to the ComKey Reader
2. Wait for the **FIRST SOLID RED LED** and remove the Program ComKey
3. The LED will stay RED for approximately 4-5 seconds; it will then begin a progression of **AMBER blinks** (1 blink, pause, 2 blinks, pause, etc)
4. **Count the number of AMBER blinks.** When the number of AMBER blinks equals the number of the ComKey slot to be deleted, touch the Program ComKey again to the Reader (be sure to wait until AFTER the desired blink)
5. The LED will turn GREEN, indicating that the ComKey was successfully deleted
6. Remove the Program ComKey from the Reader. The LED will begin blinking AMBER again starting with the next incremental slot. You may continue deleting additional ComKeys or exit the programming mode.

[If you have passed the desired slot you must exit the programming mode (see Step #8) and start again]
7. To exit programming mode either touch any ComKey that is NOT in the database or wait until all slots have been indicated by the AMBER LED. The system will then automatically return to Normal Operating mode.

DELETE A COMKEY (continued)To Delete A ComKey (using the physical key)

1. Enter Programming Mode by Touching and Holding a Program ComKey to the ComKey Reader
2. Wait for the **FIRST SOLID RED LED** and remove the Program ComKey
3. Touch the ComKey to be deleted to the Reader. The LED will blink AMBER the number of times corresponding to the ComKey's slot
4. After the last Amber blink, touch the Program ComKey to the Reader again
5. The LED will turn GREEN indicating the ComKey has been successfully deleted and will then continue to incrementally blink Amber for the remaining slots in the controller. DO NOT TOUCH THE PROGRAM KEY during this cycle unless you want to delete the ComKey slot indicated.
6. To Delete additional physically present ComKeys you must exit the programming mode (see Step #7) and repeat steps #1 - #4.
7. To exit, touch and release any **DELETED** ComKey, any other ComKey **NOT** in the database, or wait until all slots have been scrolled though; the LED will blink RED indicating a return to normal mode.

ADD A SECOND PROGRAM COMKEY

Once an initial Program ComKey has been established, it is a good idea to create a back-up. You may also want to authorize more than one individual as an administrator. The *ECS-25* allows two(2) Program ComKeys.

Reminder: Program ComKeys cannot be used for access.

To Add a Second Program ComKey

1. Enter programming mode by touching and holding the Program ComKey to the ComKey Reader
2. Wait for the **FIRST SOLID GREEN LED**
3. Touch any ComKey not already programmed into the database. The LED will turn RED indicating the Program ComKey has been added.

Note: The system allows a maximum of two (2) Program ComKeys. If you attempt to add more than two, the LED will still turn RED, but the ComKey will not be in the database.

4. Remove the new Program ComKey. The system will automatically return to Normal Operating mode, indicated by a blinking RED LED.

SETTING THE RELAY TIME

Relay time is the length of time, in seconds, that the door lock will remain disengaged when a valid ComKey has been presented. The value can be set from 1 to 240 seconds (4 minutes).

Relay time should be set to be long enough to allow a regular user to present a ComKey and open the door without undue haste, but short enough to avoid the potential security risk of the lock being disengaged for an unnecessary extended length of time.

To Program Relay Time

1. Enter programming mode by touching and holding a Program ComKey
2. Wait for the SECOND SOLID AMBER LED.
3. Remove the Program ComKey for the length of time desired as relay time
4. Re-touch the Program ComKey to lock in the Relay Time value. The LED will turn Solid RED
5. Exit the programming mode by touching any ComKey already in the database or by waiting approximately 20 seconds. The LED will blink RED indicating a return to normal operating mode.

CLEARING THE CONTROLLER'S DATABASE

In the event that all User ComKey's need to be deleted or replaced, the ECS-25 controller memory can be completely erased. Once erased it can be re-programmed.

To Clear (Erase) the Database Using a Program ComKey

1. Enter programming mode by touching and holding a Program ComKey
2. Wait for the **SECOND SOLID RED LED**
3. Continue holding the Program ComKey to the Reader for an additional five (5) seconds
4. The LED will turn Solid GREEN indicating that the database has been cleared
5. Remove the Program ComKey. The system will automatically return to normal operating mode

Alternatively, or if all Program ComKeys are lost the database can be cleared as follows:

1. Disconnect power to the Controller
2. Push and hold the re-set button (SW1) in the upper part of the controller board and at the same time, re-apply power.
3. The LED will turn GREEN and then begin blinking RED.

REMEMBER: ONCE THE DATABASE HAS BEEN CLEARED, THE EXISTING PROGRAM KEY(S) ARE NO LONGER ACTIVE.

THE FIRST COMKEY TOUCHED TO THE READER WILL BECOME A PROGRAM COMKEY.

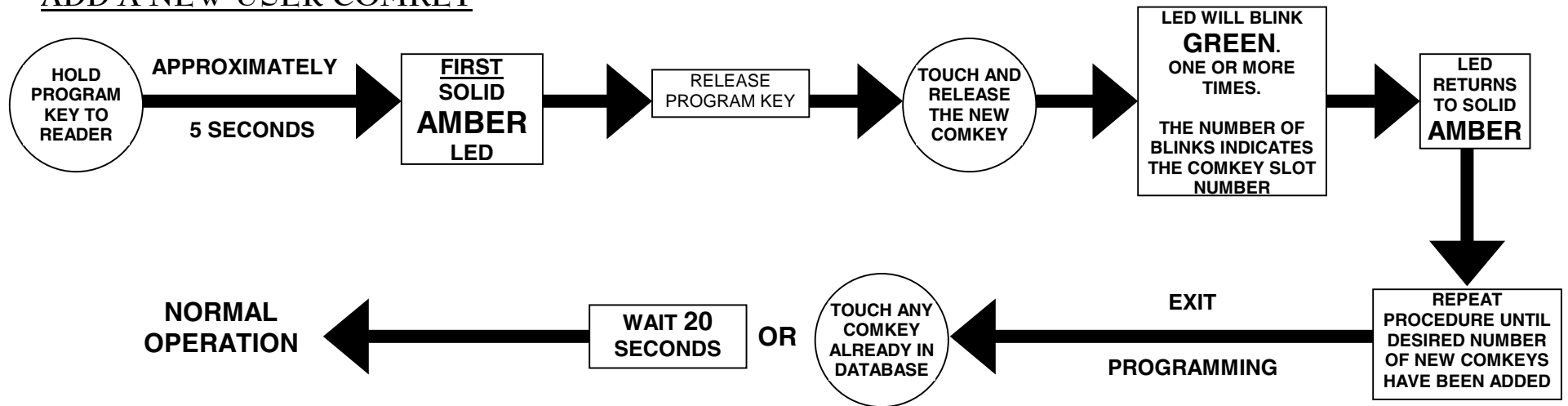
IDENTIFYING AN UNKNOWN COMKEY SLOT NUMBER

On occasion you may need to identify the slot number of a ComKey. This only applies to ComKeys that are already in the database and can be accomplished simply as follows:

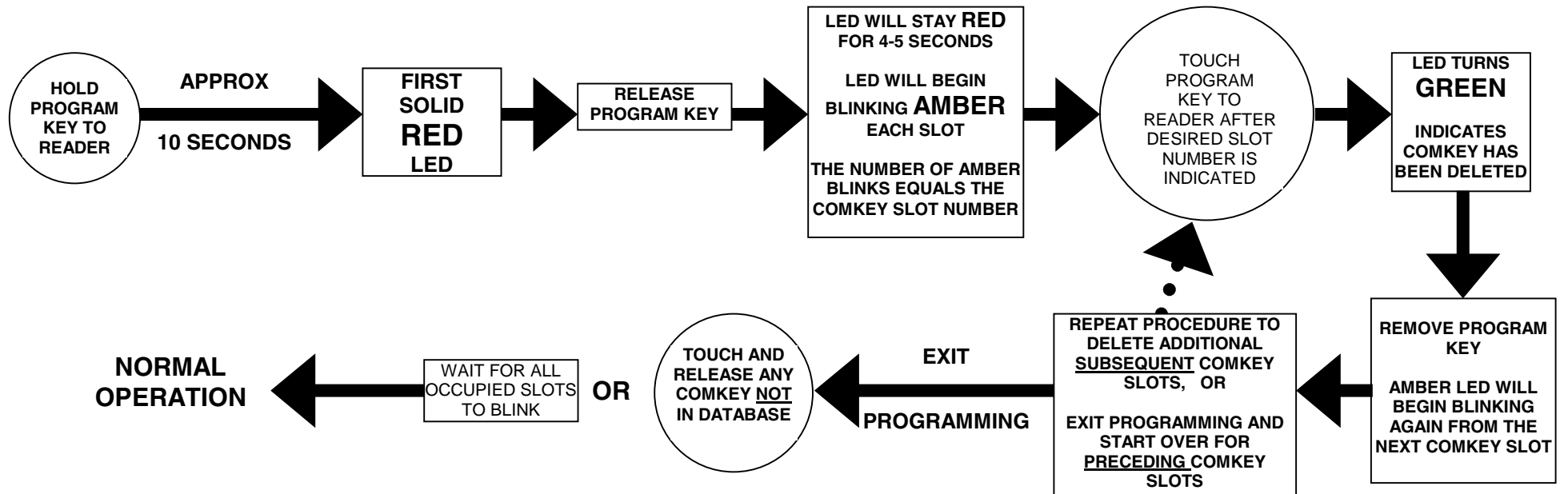
1. First touch the ComKey to the Reader to determine if the ComKey is in the database. When touched, the LED will be GREEN if the ComKey is in the database and RED if it is not.
2. Enter Programming Mode by Touching and Holding a Program ComKey to the ComKey Reader
3. Wait for the **FIRST SOLID RED LED** and remove the Program ComKey
4. Touch the ComKey to be identified to the Reader. The LED will blink AMBER the number of times corresponding to the ComKey's slot number.
5. Touch the ComKey to the Reader again to return to normal operating mode. The LED will turn GREEN and then begin blinking RED.

Programming Quick Reference Flow Charts

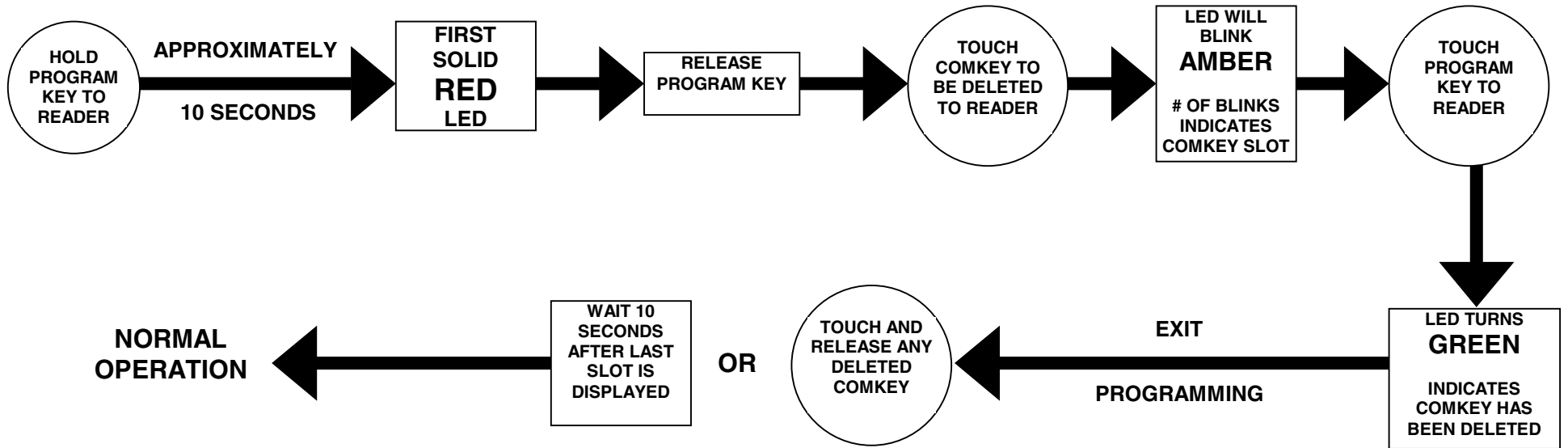
ADD A NEW USER COMKEY



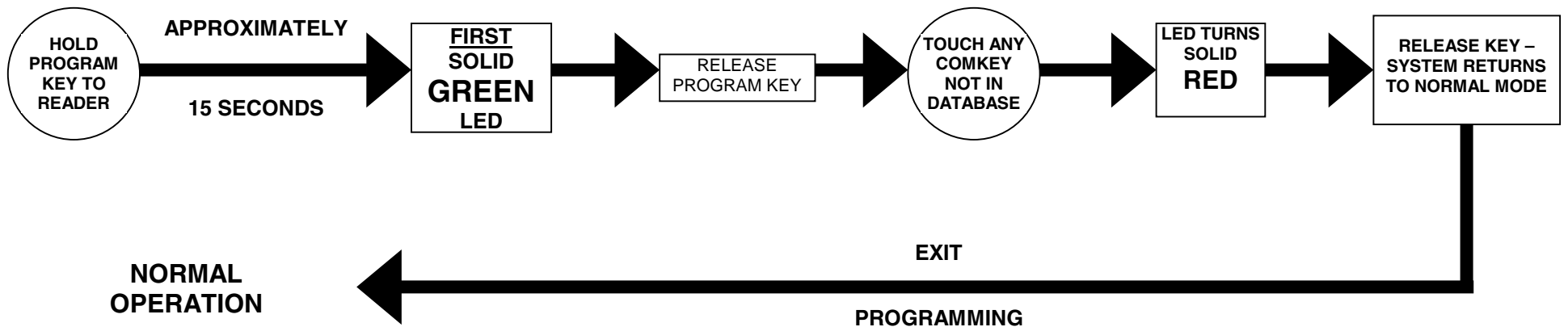
DELETE A USER COMKEY (WITHOUT PHYSICAL KEY)



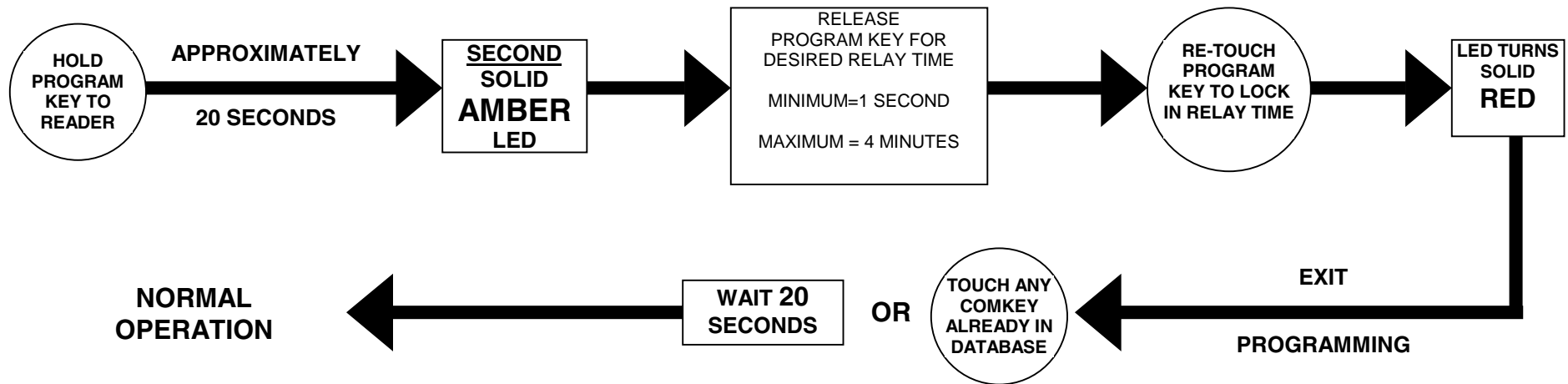
DELETE A USER COMKEY (WITH PHYSICAL KEY)



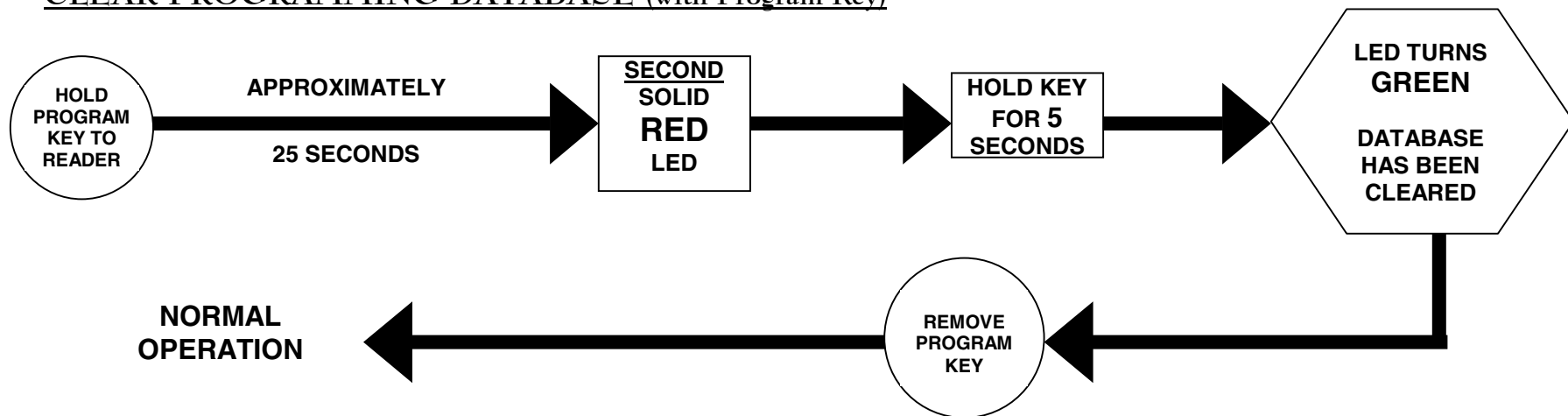
ADD A SECOND PROGRAM COMKEY



SET MOMENTARY MODE RELAY TIME



CLEAR PROGRAMMING DATABASE (with Program Key)



NOTE: ONCE THE DATABASE IS CLEARED, THE FIRST COMKEY THAT IS TOUCHED TO THE READER BECOMES THE SYSTEM PROGRAM KEY

ECS-25 USER LOG

COMKEY SLOT #	NAME	DATE ASSIGNED	OTHER INFORMATION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
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ECS Customer Feedback Form

We would like to hear from you. If you have any suggestions or questions, please feel free to call your distributor or you may call Access Controls International: National: 1-888-810-6060 International: 1-732-462-7236

Customer Information

Date: _____
Name: _____
Company: _____
Address: _____
City: _____ State/Province: _____
Country: _____ Zip Code/Postal Code: _____
Telephone Number: _____
Fax Number: _____
E-Mail Address: _____

Controller Information

Model Number: 25___ 100___ 100W___ 200___ 200W___ TURBO___ TURBO-W___
Date of Purchase: _____ Date of Installation: _____
Controller Serial #: _____
Controller Configuration:
 Number of Doors: _____ Number of Readers: _____ Number of Users: _____
Credential Technology: _____

Please attach a printout of your system configuration.

Suggestion – Question – or Description of Problem

Attach additional sheets if necessary:

Office Use Only

Date Reported: _____ Date Responded: _____

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