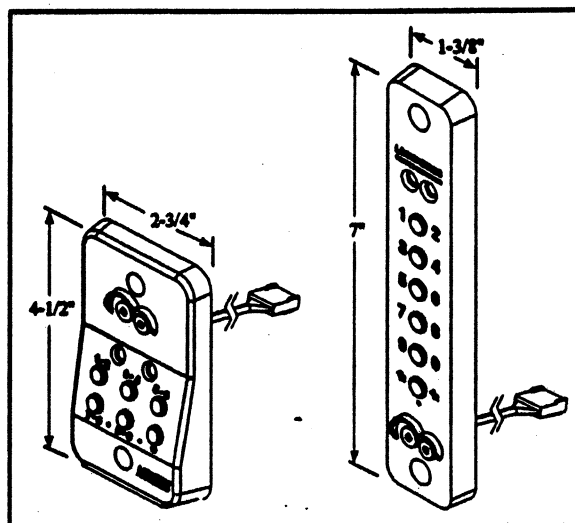
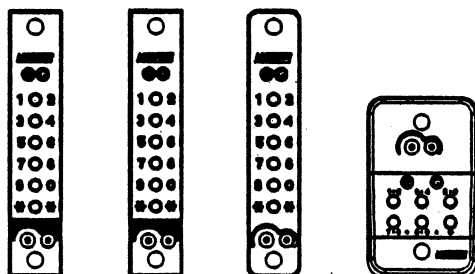


# SELECTENTRY™

Computer Programmable  
Keyless Entry  
Access Control System



## GENERAL DESCRIPTION

The CT150SE keypad system utilizes a microprocessor based controller to program user access to an area secured by an electric locking device. Access is restricted to those individuals that have a valid user code. The keypad controller will accept 150 individual codes and each code may be programmed with a variety of unique features.

### Programming Note:

To program the SelectEntry controller, use this manual in conjunction with "LockTrak Access Control Software Manual" form 10003. Programming is done using the Locknetics Computer Interface Pack (CIP) which includes the computer software and cables.

Programming with a computer allows you to take advantage of SelectEntry access ability. SelectEntry allows programming of keypad codes only, TouchEntry keys only, and combinations of both access types within the same system. Computer programming will also allow the retrieval of the past 100 transactions when the controller is equipped with the audit trail (ATR) option.

## SPECIFICATIONS

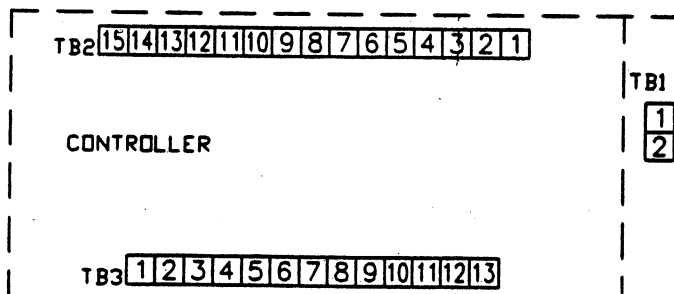
### Electrical:

Power Requirements: 12 or 24 VAC/VDC - 0.2A  
Control Inputs: External switch contacts must be rated for 25mA resistive load minimum.  
**IMPORTANT: DO NOT APPLY VOLTAGE TO ANY CONTROL INPUTS**  
Control Outputs: Alarm - N.O. - 1.0 Amp resistive load @ 30V  
MBS - SPDT 1.0Amp resistive load @30V  
Lock Control Dry Contact Output - SPDT 2 Amp @ 30 Volts  
Lock Control Voltage Output - VDC @ 1 Amp Max

### Mechanical:

Controller: Enclosure: Steel NEMA Grade 1 with conduit knockouts and hinged cover with lock down screws, keylock cover optional.  
Finish: Beige, Baked enamel  
Terminals: Screw terminals

# STEP 1: TERMINAL LAYOUT & WIRING CONNECTIONS



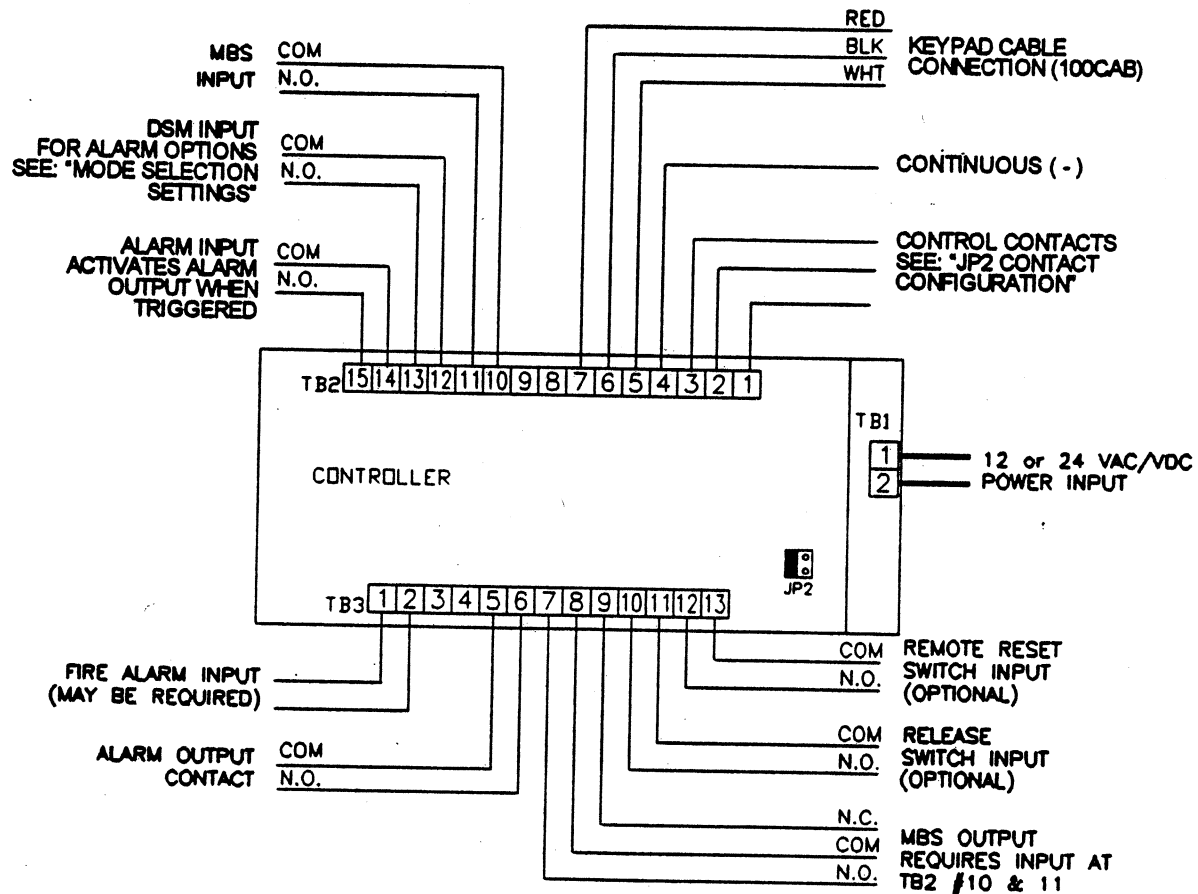
**WIRING** - All wiring must conform to applicable national, state, and local electrical codes for class 2 fire protection signaling and control devices. Use wiring of sufficient size to provide the required voltage at the lock. When installing cable, a minimum of two spare conductors is recommended.

**NOTE** - Refer to **WIRING INFO** section for more information regarding connections to these terminals.


CONTROLLER TERMINAL FUNCTIONS		
<b>TB1</b>	1 & 2	12 OR 24 VAC/VDC POWER INPUT - 0.2 Amps max. current draw
<b>TB2</b>	1, 2 & 3	<b>CONTROL CONTACTS</b> Contacts used to control external equipment providing positive (+) voltage output or dry contacts dependent on the configuration of JP2, see "JP2 OUTPUT CONTACT CONFIGURATION" on page 4.
	4	<b>GROUND</b> Provides an unswitched ground to external equipment.
	5, 6 & 7	<b>KEYPAD CABLE INPUT (100CAB)</b> Input from a keypad adapter cable, model 100CAB, allows connection of one or two Locknetics keypads.
	8 & 9	NOT USED
	10 & 11	<b>MAGNETIC BOND SENSOR INPUT</b> Input from an open lock status switch, Magnetic Bond Sensor, will provide a SPDT output at TB#3 terminals 7, 8 and 9 MBS output.
	12 & 13	<b>DOOR STATUS SWITCH INPUT</b> Input from door position switch contacts at these terminals activates the "Security Alarm" features monitored at the Alarm Output Contacts.
	14 & 15	<b>ALARM CONTACT INPUT</b> Input from an open alarm switch activates the Alarm Output Contacts.
<b>TB3</b>	1 & 2	<b>FIRE ALARM INPUT</b> Input from dry contacts to release the locking device when fire panel is activated. (SET SW1 - page 4)
	3 & 4	NOT USED
	5 & 6	<b>ALARM CONTACT OUTPUT</b> Normally open dry contact used to monitor a variety of alarm conditions.
	7, 8 & 9	<b>MAGNETIC BOND SENSOR OUTPUT</b> SPDT contacts which follow the "MBS INPUT".
	10 & 11	<b>LEGAL RELEASE INPUT</b> Providing a contact closure across these terminals activates "CONTROL CONTACTS" for a programmable amount of time, see "Automatic Relock Delay" page 5.
	12 & 13	<b>RESET INPUT</b> Momentary contact closure across these terminals will reset an alarm condition.









### TYPICAL WIRING CONNECTIONS

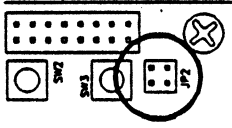


The following diagram shows the typical connections to the CT150-SE keypad controller. Some of the terminals may not be used, depending on specific system requirements.



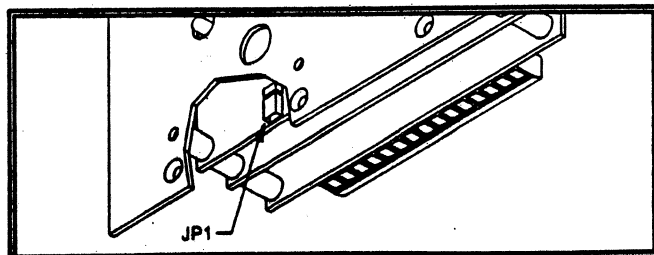
**STEP 2:**  
**SWITCH SETTINGS & CONTROLLER CONFIGURATION**

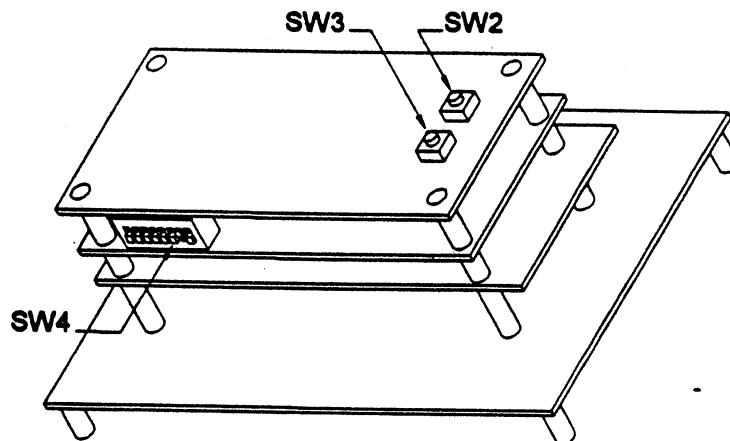
SW1 FIRE ALARM INPUT SETTING (TB3 - TERMINALS 1 & 2)					
FUNCTION	FACTORY SETTING		SW1	FUNCTION	
SET TO MATCH NON-ALARM STATE OF FIRE ALARM CONTACTS. LOCK WILL RELEASE UPON F.A. SIGNAL	NORMALLY CLOSED F.A. CONTACTS	LEFT		RIGHT	NORMALLY OPEN F.A. CONTACTS OR NO CONNECTION

SW4 MODE SELECTOR SWITCH SETTINGS					
FUNCTION			SW 4 FACTORY SETTINGS	FUNCTION	
NOT USED	ON			8	OFF
AUTO-RELOCK ON POWER UP AND AFTER FIRE ALARM RESET	ON			7	OFF
DOOR PROPPED OPEN and FORCED ENTRY ALARM (Door Status Input required)	ON			6	OFF
UNLOCK ALERT (Horn sounds whenever door is unlocked)	ON			5	OFF - NORMAL OPER.
ANTI-TAILGATE (Door Status Input required)	ON			4	OFF
NOT USED	ON			3	OFF
NOT USED	ON			2	OFF
NOT USED	ON			1	OFF

JP2 OUTPUT CONTACT CONFIGURATION		
THE JUMPER AT JP2 CONFIGURES THE OUTPUT CONTACTS AT TB2 TO PROVIDE EITHER A DC VOLTAGE OUTPUT TO OPERATE A LOCK DIRECTLY OR A SPDT DRY CONTACT OUTPUT TO CONTROL OTHER EQUIPMENT THAT MAY OPERATE FROM A DIFFERENT POWER SOURCE.		
	 JP2	<b>DC VOLTAGE OUTPUT (FACTORY SETTING)</b> TB2 - #1 = POSITIVE TB2 - #4 = NEGATIVE
	 JP2	<b>SPDT DRY CONTACT OUTPUT</b> TB2 - #1 = CLOSED TB2 - #2 = COMMON TB2 - #3 = OPEN

JP1 ON-BOARD HORN CONFIGURATION (LOCATED ON EDGE OF BOARD AS SHOWN)	
ON	HORN ENABLED
REMOVE	HORN DISABLED





**AUTOMATIC RELOCK DELAY** (factory default - 5 seconds)

The amount of time the lock is de-energized after Authorized Release signal - programmable 0-30 seconds.

- 1) Set SW4 #6 to OFF.
- 2) Press and release SW2.
- 3) Press SW3 once for each second of relock delay desired.  
(ex. 3 presses equals 3 seconds-15 presses equals 15 seconds-Up to 30 seconds) Each SW3 activation will cause the horn to beep.
- 4) Press SW2 and the relock delay will be stored in non-volatile memory.
- 5) The relock delay can be set to zero by eliminating Step 3.

*This delay may be set using the computer software, see "LockTrak Access Control Software Manual".*

**DOOR PROPPED OPEN DELAY** (factory default = 60 seconds - Door Status Input required)

The amount of time before Alarm sounds and alarm contacts close if door is held open past the relock delay - programmable 0-120 seconds

- 1) Set SW4 #6 to ON.
- 2) Press and release SW2, the LED will begin flashing YELLOW.
- 3) Press SW3 once for each second of door propped delay desired.  
(ex. 3 presses equals 3 seconds-45 presses equals 45 seconds-Up to 120 seconds)  
Each SW3 activation will cause the LED to flash RED and beep the horn.
- 4) Press SW2 and the door prop delay will be stored in non-volatile memory.
- 5) It is not recommended to program this delay to zero but it can be accomplished by eliminating Step 3.

*This delay may be set using the computer software, see "LockTrak Access Control Software Manual".*

**RESETTING** resetting will return the controller to the factory default setting shown above.

- 1) Press and hold SW2 for a minimum of three seconds until you here a single beep.
- 2) Immediately following the single beep quickly press SW2 three times; you will hear three beeps.
- 3) Wait about five seconds for another three beeps indicating the memory has been erased.

**NOTES:**

1. During programming of either delay, if no SW2 or SW3 action is detected in a 30 second period, the programming is canceled.
2. All delays are stored in non-volatile memory to retain the settings when power is disconnected.
3. Resetting will require repeating the keyed initialization procedure.

## STEP 3: KEYPAD INITIALIZATION & DESCRIPTION

One or two keypads may be connected to a CT150-SE keypad controller using the 100CAB interface cable. The 100CAB connects to the controller at TB2 terminals 5, 6, and 7 and to the keypad(s) by a keyed plug-in connector. Some installations may require an extension for the cable at the back of the keypad to connect the 100CAB. Extension cables are offered in two lengths, 1 foot for short extensions AUXCAB1, and 16 feet for longer extensions AUXCAB16.

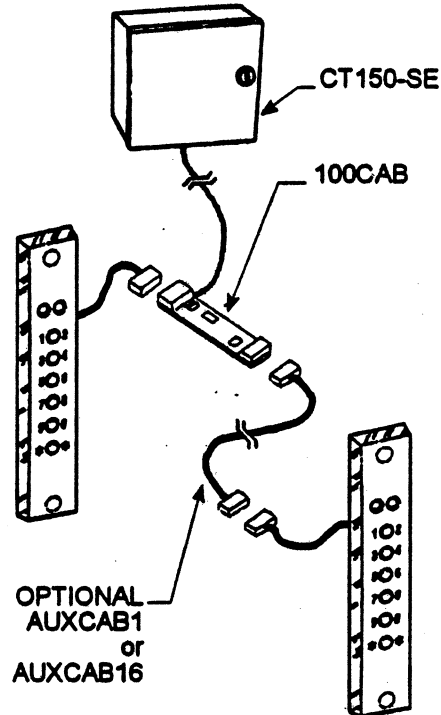
### INITIALIZE KEYPAD

1. Set SW4 #1 to "ON".
2. Press and hold SW3 until the audible beeps twice.
3. Press each keypad key consecutively starting with key **1 2** through the **\* \*** key.

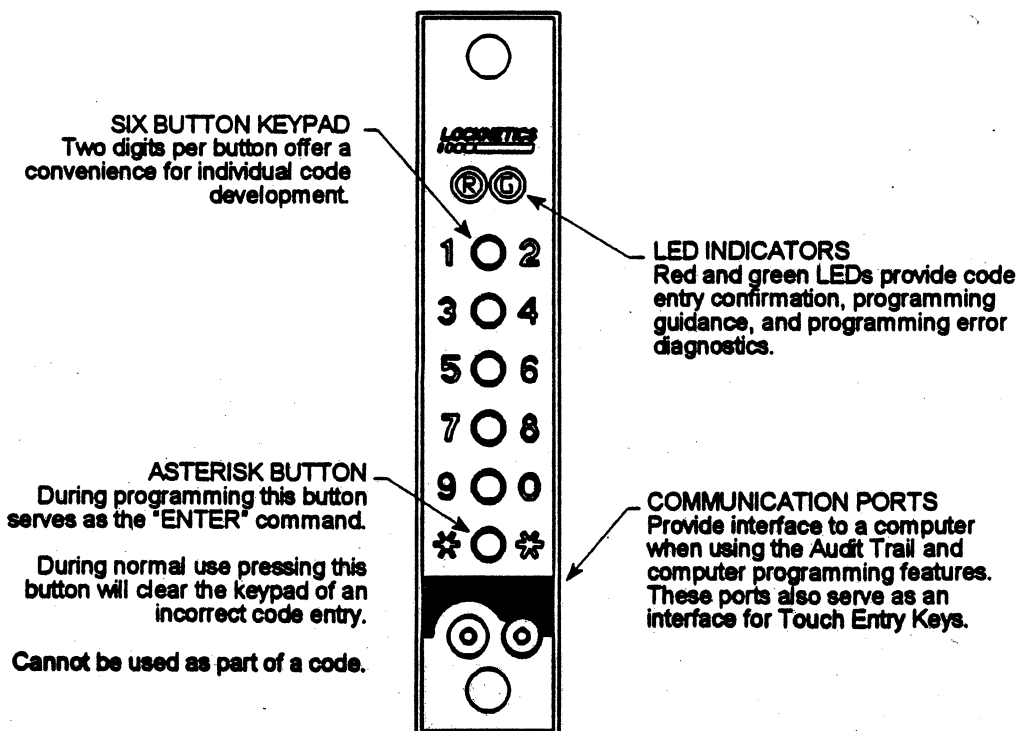
The unit will beep twice to indicate the key was registered. Wait until LEDs stop flashing before pressing next key.

After the **\* \*** key is pressed the unit beeps three times to indicate initialization is complete.

4. Return switch SW4 #1 to "OFF".
5. The SYSTEM may now be tested.



### KEYPAD DESCRIPTION



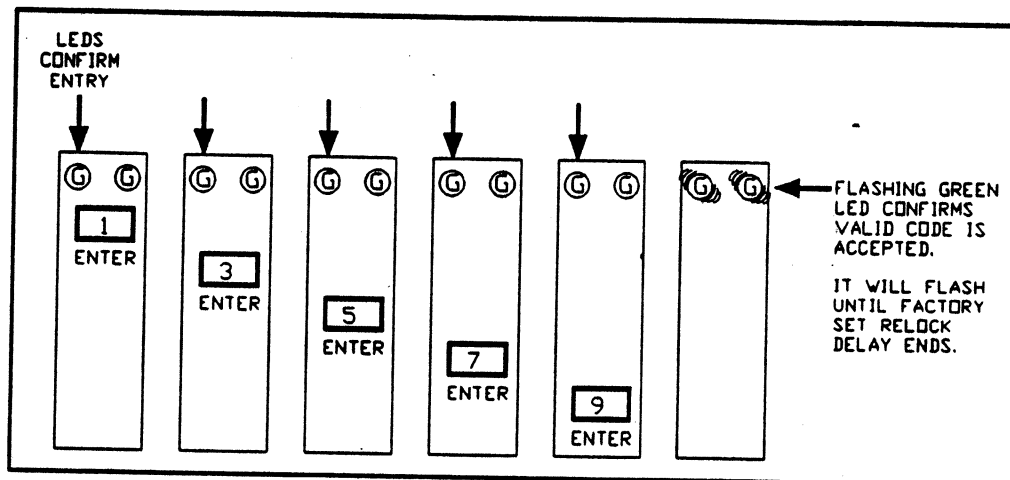
## TESTING WITH FACTORY SET CODES

Once the keypad has been initialized the system may be tested. There are two preprogrammed codes, one code that grants access called the **USER CODE**, and one code that begins the programming procedure called the **MASTER CODE**.

### Test the USER CODE:

The factory set **USER CODE** is **1 3 5 7 9** :

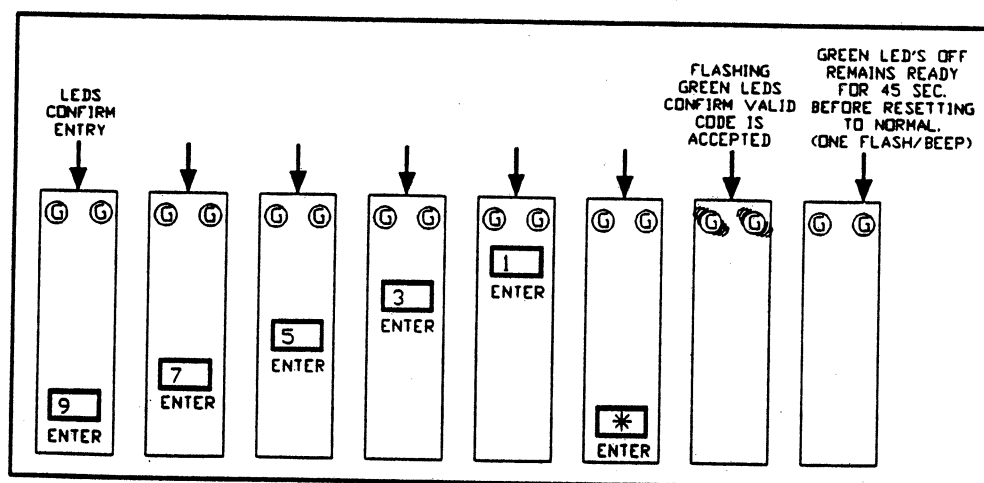
After entering the **USER CODE** observe the green LED on the keypad flash indicating the code has been accepted. The control relay will change state to activate the device being controlled.



### Test the MASTER CODE:

The factory set **USER CODE** is **9 7 5 3 1 \*** :

After entering the **MASTER CODE** you will see the red and green LEDs on the keypad alternate indicating the code has been accepted and the unit is ready for programming. The control relay will *not* change state. The Master Code only grants access to programming functions.



**NOTE:** The **MASTER CODE** allows access to programming functions. It will not release the locking device. To insure system security, change the factory set codes.

## STEP 4: SELECT METHOD OF PROGRAMMING

To program your system with users you may use a Master Code or a Master TEK (TouchEntry Key).

If using a Master keypad code, it is recommended that the factory set Master Code be changed to insure system security. The Master Code can be 5 to 8 digits long and must not contain the asterisk as a digit.

TO CHANGE THE MASTER CODE		
NOTE: THE FACTORY SET MASTER CODE IS 9 7 5 3 1		
STEP	ENTER	DESCRIPTION
①	EXISTING MASTER CODE * (R) (G)	PROGRAMMING ACCESS MASTER CODE ACCEPTED
②	7 * (R) (G)	"TO CHANGE THE MASTER CODE" ACCESS ACCESS GRANTED
③	NEW MASTER CODE * (R) (G)	NEW MASTER CODE MASTER CODE ACCEPTED - AWAITING 2ND ENTRY
④	NEW MASTER CODE * (R) (G) (R) (G)	VERIFICATION BY RE-ENTRY MASTER CODE CHANGED LEDs OFF - PROGRAMMING ENDED

If a Master TEK "MTEK" is preferred for programming, create an MTEK using the following procedure.

1. Select any touch entry key (TEK) from those ordered separately for your system. Mark the selected TEK as a "MASTER" (MTEK).  
NOTE: Any TouchEntry Key may be considered "Blank" until initialized during programming. Used TEK's may also be reprogrammed.
2. Move controller switch SW4 #1 to the "On" position.
3. Press and hold Controller switch SW3 for 5 seconds, or until audible beeps twice, then release. You now have 15 seconds to create the Master Key.
4. Touch the "Master" TEK to the reader on the Keypad, see "Keypad Description" on page 6, the LED's will alternate to indicate acceptance.

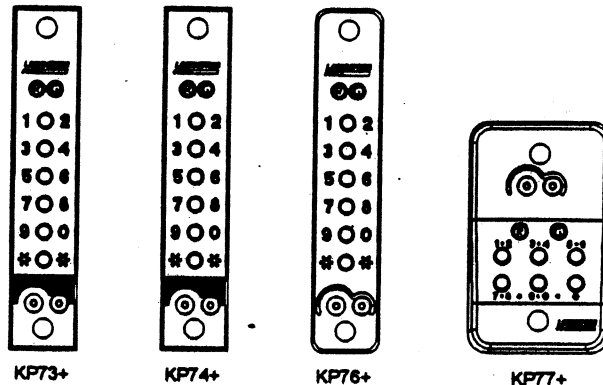


## KEYPAD MOUNTING AND TEMPLATE INFORMATION

These mounting instructions are intended for use with all Locknetics keypad models.

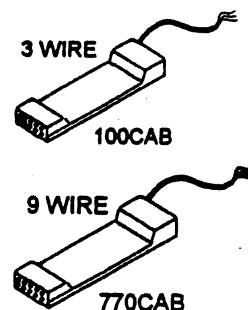
### Model Description:

- KP73+ 6-3/4" x 1-3/8", available in special finishes
- KP74+ 6-3/4" x 1-3/8", Stainless finish
- KP76+ 7" x 1-3/8", Black Lexan
- KP77+ 4-1/2" x 2-3/4", Black Lexan  
(single gang electrical box mount)



### Accessories:

- 100CAB Connection cable, three wire, from one or two keypads to CT150SE controller.
- 770CAB Connection cable, nine wire, from one or two keypads to CT150KP controller.
- AUXCAB1 Auxiliary extension cable, one foot. Used for connecting keypad to adaptor cables, 770CAB or 100CAB.
- AUXCAB16 Auxiliary extension cable, sixteen feet. Used for connecting keypad to adaptor cables, 770CAB or 100CAB.

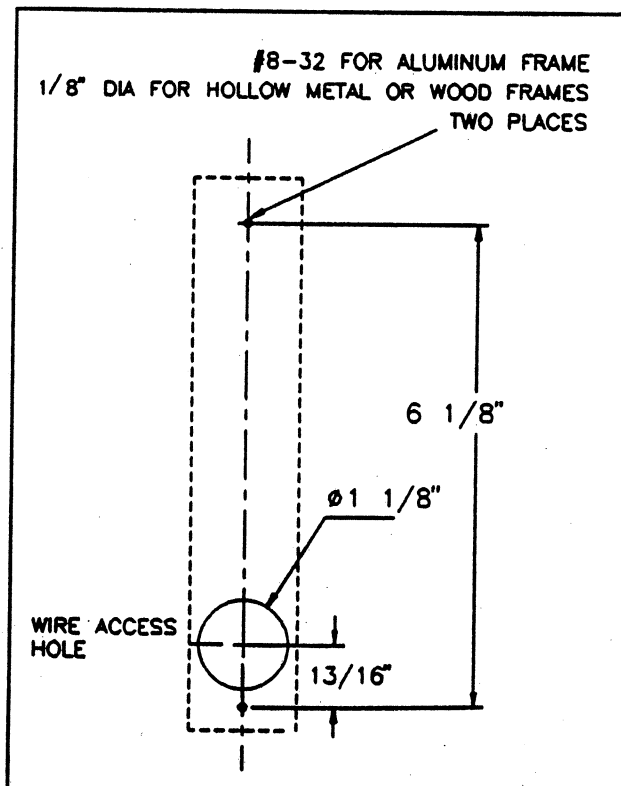


### Keypad Mounting:

**Step #1:** Prep wall or frame as shown in **Figure 1**.

- a) Drill two (2) mounting holes 6-1/8" from center to center to secure keypad as shown.
- b) Drill one (1) wire access hole 1-1/8" DIA. for connection cable at 13/16" above center of lower mounting hole.

**Note:** If mounting two keypads back to back, be sure hole locations are in alignment.



**Figure 1** Mounting hole location.

## Step #2: Connect keypad(s) to connection cable.

*For single keypad: Figure 2.*

- Pass module of connection cable through access hole.
- Connect the keypads connector to module side of the connection cable.

*For two (2) keypads mounted back to back: Figure 3.*

- Pull connection cable through hole and connect first keypad to side "A" of the connection cable. Connecting the first keypad to side "A" of the connection cable allows access to cable for the second keypad.
- Feed cable back through wire access hole and connect the second keypad to side "B" of the connection cable.

**Notes:** 1. If using the AUXCAB1 for connecting two (2) keypads on deep or non-standard frames, connect AUXCAB1 to the first keypad before connecting the connection cable.

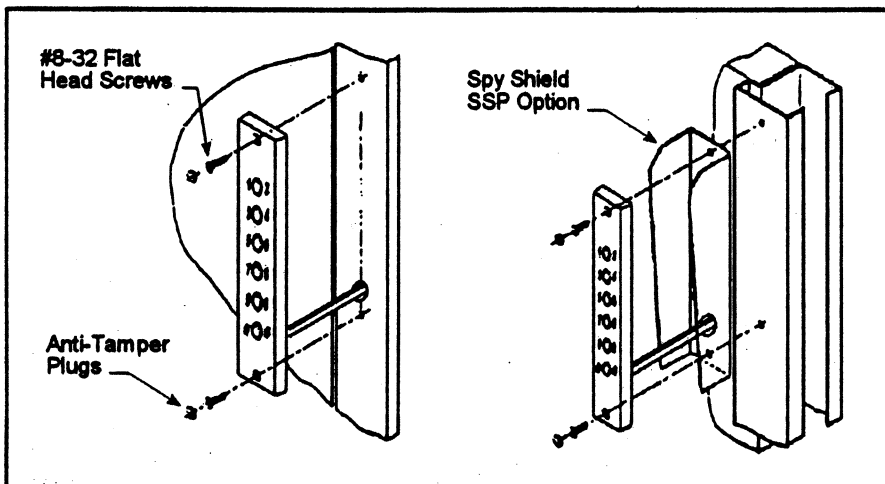
*For two (2) keypads, one local one remote: Figure 4.*

- Pull connection cable through hole and connect first keypad to one side of connection cable.
- Connect one end of the AUXCAB16 to the remote keypad, connect the other end of the AUXCAB16 to the other side of the connection cable.

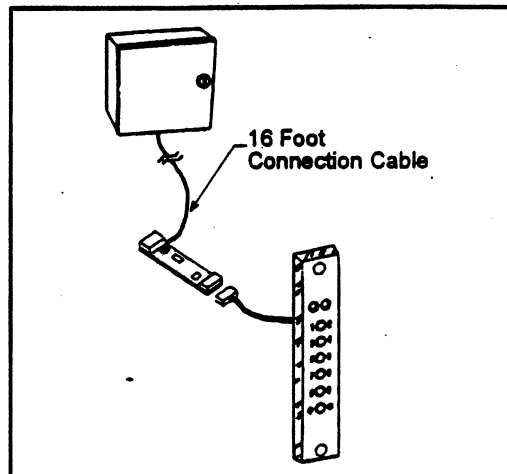
## Step #3: Mount Keypad(s).

*For wall or frame mounting: Figure 5.*

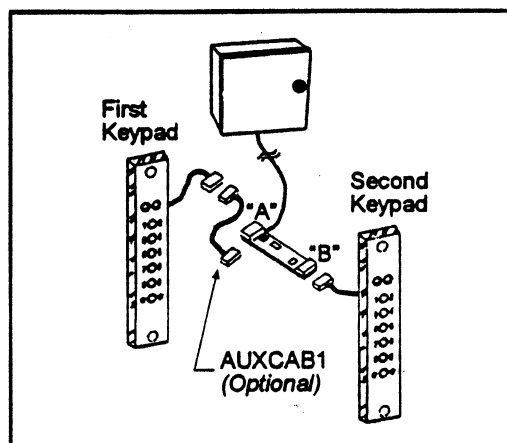
- Secure the keypad to wall or frame using (2) #8-32 flat head screws.
- Conceal screws with (2) anti-tamper plugs supplied.



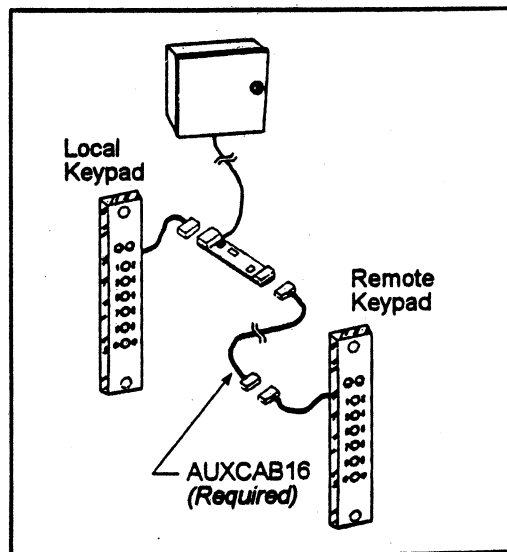
**Figure 5** Mount keypad to wall or frame.



**Figure 2** Connecting single keypad.



**Figure 3** Connecting two local keypads.



**Figure 4** Connecting local and remote keypads.