

MODEL 100A  
INSTALLATION INSTRUCTIONS

1. Make arrangements with the local telephone company for installation of a standard telephone line with Touchtone dialing. The telephone company will need the following information:

FCC Registration No. - AZ889B-62546-DI-T  
Ringer Equivalence - 0.6B  
Connector Type - Screw type barrier strip

2. Determine where and how the unit will be mounted for your application. A drill Guide sheet is enclosed for your convenience and indicates the position of the four 5/16" mounting holes located on the back of the unit. The two 1/2" holes are for passing the two phone line wires, the two power supply wires and the two gate control wires through.
3. String the telephone wires through the access hole in the rear of the unit. If more than two wires are present then use only the RED and GREEN wires. The RED and GREEN wires can be swapped with each other because the unit is not polarity sensitive. Insulate any other telephone wires from coming in contact with anything.

CAUTION: Do not allow bare phone wires to come in contact with any part of the electronics inside unit.

4. A power transformer is supplied with each unit that requires 120 V.A.C. input and delivers 12 V.A.C. at about 2 amps. The wires that carry the low voltage from the transformer to the unit should be kept as short as possible to prevent local R.F. energy from entering the unit. If this is a problem then an EMI filter between the transformer and unit should be installed (as close as possible to the unit). These filters are available from the factory.

Additionally, power loss over long wire runs must also be taken in consideration. Below is the recommended gauge wire that should be used depending on the distance between the transformer and the Trigon unit.

1 to 25 feet ..... 20 AWG  
25 to 75 feet ..... 18 AWG  
75 to 150 feet ..... 16 AWG

5. Connect the case of the Trigon unit to a good earth ground! Several protection schemes will be violated if this advice is not followed.
6. Apply power, lift handset and dial tone should be heard. To test the strike relay, remove the wire nuts from the Postal Input wires and briefly short them together. Be very careful they do not come in contact with anything else. A beeping tone will be heard through the handset and the gate relay should energize.
7. If your installation requires the N.C. contacts then do the following:
  - A) Remove power again.
  - B) Locate 3 round pads on upper board in the upper left corner. (See Hookup Diagram provided)
  - C) They are marked:

NO NC  
()-()
  - D) Notice the center pad is connected to the left pad.
  - E) With a sharp knife, cut the trace between the left pad and the center pad.
  - F) Solder a jumper from the center pad to the right pad.

NO NC  
()()-()

8. You may now close up the unit and proceed with programming the unit. A flow chart of the programming mode has been provided to simplify everything. If this is your first time, read the instructions and compare your progress against the flow chart.

NOTE: This unit is NOT programmed in the same way as its predecessor, the Model 100.

## Operation of Model 100A

### Visitor:

A visitor approaches the Model 100A and locates on a directory the resident code of the person they wish to visit. The visitor lifts the handset and enters that resident's code. The Model 100A will dial the resident's actual phone number stored in its memory. If the resident answers the phone, a two-way conversation may take place.

If the resident decides to allow entry, they dial a '0' on their touch-tone phone and both parties will hear a beeping tone to proceed. The resident may now hang up and the Model 100A will hang up as soon as the gate time has elapsed. The visitor, of course, should have proceeded through the gate while the Model 100A was still beeping.

### Resident:

A resident will receive a call from a visitor at the gate. If the resident decides to allow an entry, they simply dial '0' on their touch-tone phone.

The resident just hangs up to deny entry, or better yet, pushes the '\*' key to force the Model 100A to hang up immediately, and then hangs up.

### Direct Entry:

- 1) Lift the handset to get dial tone.
- 2) Push the '#' key, followed by the 4 digit entry code assigned to that resident.

By doing steps 1 and 2 above, a resident may enter the secured area without placing a call. This feature is optional and must be ordered at purchase time.

## Programming Guide for Model 100A

The Following represents a series of steps typical for setting up a Model 100A that has just been installed.

After power has been applied to the unit and phoneline connections are made:

Lift the handset or call the unit's phone number and wait for an answer tone.

### 1. Place unit into programming mode:

Dial "\*4321" on your keypad. Unit should respond with 2 beeps. You are now in programming mode.

If you have changed this programming code then write the new number you have selected below for the record. (substitute the number written below for "4321" above)

\* \_ \_ \_ \_

Remember, the sequence must begin with the "\*" key and contain exactly 4 numerical digits.

If setpoints are already defined then skip to step 3. The setpoints must be done before loading tenant information. If, at some future time, you decide to change a setpoint remember not to alter the resident code length as this will make all previously loaded tenant data inaccessible except to master erase.

### 2. Define unit's setpoints:

Enter "\*1-4-3-2-0-#".

Each separated digit above has a special function.

"\*1" means "The next 4 digits are setpoint values."

"4" means "Allow 4 digits for resident code length."  
(range 1 to 4 digits)

"3" means "Incoming calls answered after 3 rings."  
(range 1 to 9 rings)

"2" means "Set gate open time to '2' intervals."  
(range 1 to 9 intervals at 5 seconds each)

"0" means "Don't erase all current memory slots."  
(0 or 9, 0 = no erase, 9 = do erase)

"#" means "End of command."  
(unit responds with 2 beeps)

If you selected "9" as the last digit then all memory slots will be erased. There will also be a pause of several seconds between the first and second beeps.

You may now repeat step 2 with your particular preferences. See Glossary for definition of terms if you have any questions.

3. Enter a tenant's personal data into a slot.

Each tenant is automatically assigned an empty data slot for their "Resident Code", "Phone Number", and "Direct Entry Code". The example below is for a tenant that "Lives in apt. 1234, has a phone number of 555-1212 and wants direct entry with code 2468". Remember, all resident code numbers must be the same number of digits.

Example:

Enter "1234 # 5551212 # 2468 #

Note: If you try this example then also do example in step 4 to remove this particular example data.

Unit responds with 2 beeps if everything is OK. If 3 beeps are heard then something is wrong, such as insufficient memory.

After entering the above information, the unit will store it in an empty slot, or, if the resident code defined is already in memory, then the new phone number and entry code will replace the old ones.

You may repeat step 3 procedure until memory slots are filled or just push "#" for early termination of the programming mode.

4. If you just want to erase a slot then enter the following sequence:

\*2 1234 #

"\*2" means "Erase the slot that contains the following resident code."

"1234" is the resident code itself.

"#" means "end of command."

Unit responds with 2 beeps if successful and 3 beeps if no slot is found with the resident code defined.

5. If you want to change the programming code then enter the following sequence:

\*3 9876 #

"\*3" means "replace the current program access code with the following 4 digits."

"9876" is the new programming code number.

"#" means "End of command."

Substitute your own 4 digit number for "9876" above. For the record, write this number on the line provided in step 1.

6. Glossary of terms.

**Memory slots.** There are 125 slots of computer memory that contain 3 pieces of linked information each:

**Resident code.** A code number, from 1 to 4 digits in length, used to identify a particular resident.

**Phone number.** The actual phone number belonging to that particular resident.

**Entry code.** A unique 4 digit code number that will permit this resident immediate gate entry via the keypad, without placing a phone call.

**Setpoints.** There are 3 setpoints that control the behavior of the unit:

**Resident code length.** This is a single digit value that defines how many numbers, from 1 to 4, are to be used as a resident code for all residents.

**Ring count.** This is a single digit value that defines how many ring cycles the 100A will wait before automatically answering the phone when called for remote programming purposes.

**Gate release intervals.** This is a single digit value that defines how long to apply power to the gate release mechanism. Each interval is about 5 seconds in length, thus a "4" will define about a 20 second gate release time.

Program code. A special 4 digit number that allows access to critical data such as memory slots, etc.

Master Erase. This function erases all memory slots but does not affect the setpoints.

"#", "\*". These symbols are always used to define the push buttons on a touch-tone phone and never as abbreviations for 'number', etc.

You may use the table below to record the numbers programmed into the unit's memory. Use a pencil so that changes can be made over time.

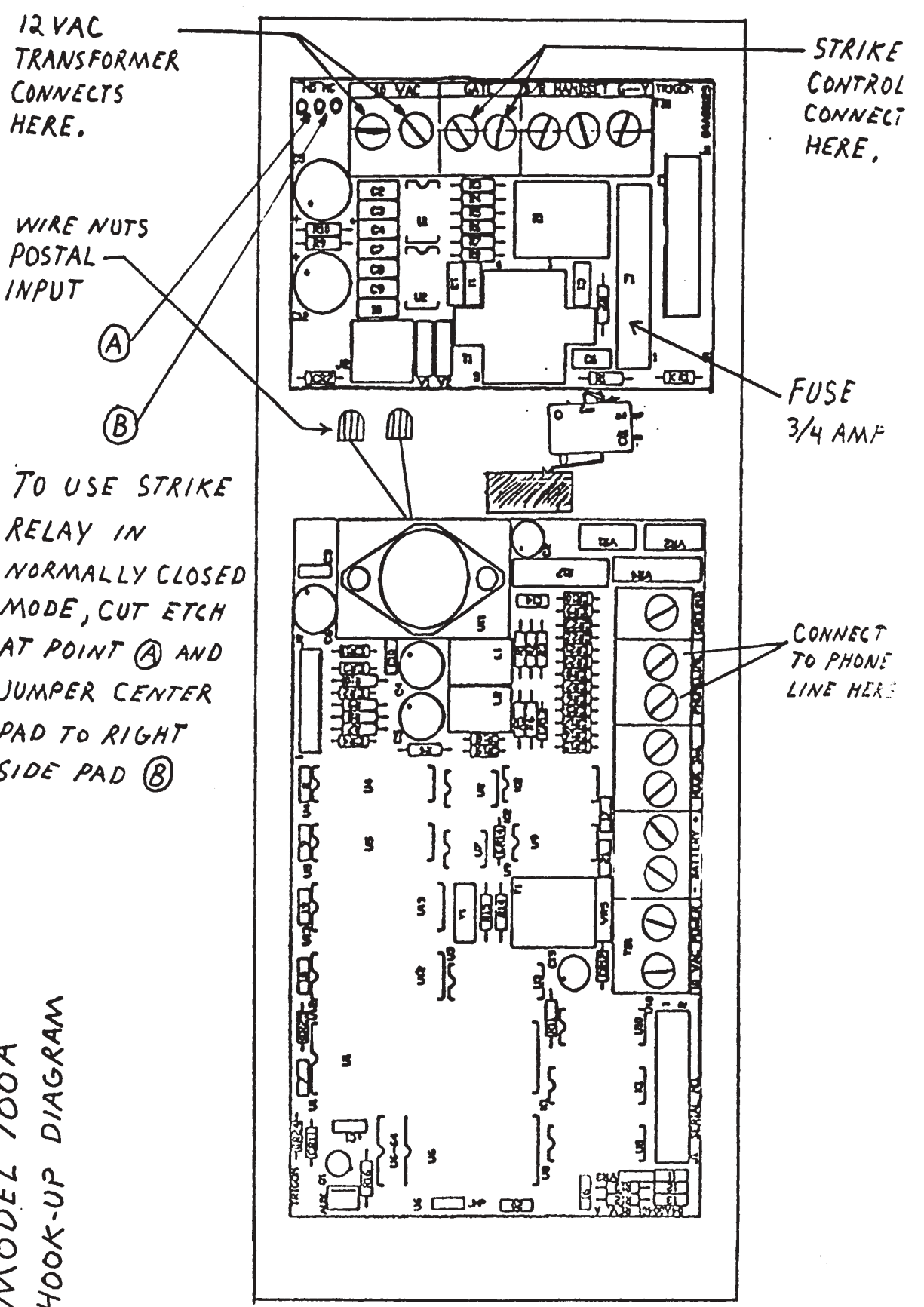
If you bought the Model 100A without Entry Codes then ignore third column below and notice that the Unit responds with double beeps immediately after the "#" key termination following the Phone Number input.

<i>Memory Pos'n</i>	<u>RESIDENT CODE</u>	<u>RESIDENT PHONE NUMBER</u>	<u>ENTRY CODE</u>
001:	#		#
002:	#		#
003:	#		#
004:	#		#
005:	#		#
006:	#		#
007:	#		#
008:	#		#
009:	#		#
010:	#		#
011:	#		#
012:	#		#
013:	#		#
014:	#		#
015:	#		#
016:	#		#
017:	#		#
018:	#		#
019:	#		#
020:	#		#
021:	#		#
022:	#		#
023:	#		#
024:	#		#
025:	#		#

RESIDENT CODE      RESIDENT PHONE NUMBER      ENTRY

026:	#	#
027:	#	#
028:	#	#
029:	#	#
030:	#	#
031:	#	#
032:	#	#
033:	#	#
034:	#	#
035:	#	#
036:	#	#
037:	#	#
038:	#	#
039:	#	#
040:	#	#
041:	#	#
042:	#	#
043:	#	#
044:	#	#
045:	#	#
046:	#	#
047:	#	#
048:	#	#
049:	#	#
050:	#	#
051:	#	#
052:	#	#
053:	#	#
054:	#	#
055:	#	#
056:	#	#
057:	#	#
058:	#	#
059:	#	#
060:	#	#
061:	#	#
062:	#	#
063:	#	#
064:	#	#
065:	#	#
066:	#	#
067:	#	#
068:	#	#
069:	#	#
070:	#	#
071:	#	#
072:	#	#
073:	#	#
074:	#	#
075:	#	#

MODEL 100A  
HOOK-UP DIAGRAM



**PROGRAM MODE AND SETUP  
FLOW DIAGRAM**

START



\*4321 FACTORY PRESET ACCESS CODE



BEEP-BEEP



WAIT FOR MORE INPUT

