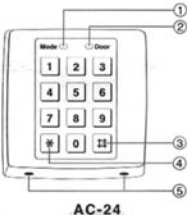
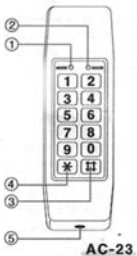
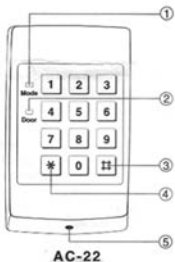
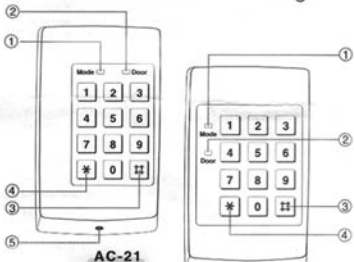




SERVANT

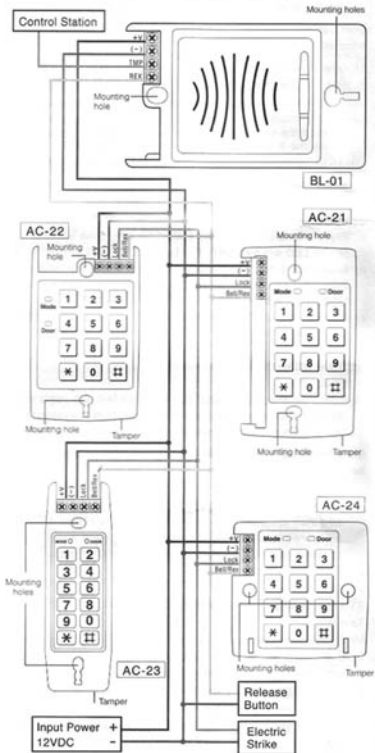
MODEL: AC-21, AC-22, AC-23, AC-24
 SELF CONTAINED SINGLE DOOR CONTROLLER
 -99 PROX USERS

Installation and Operation Instructions



1. MODE status indicator LED
2. DOOR status indicator LED
3. # key
4. * bell key
5. Cross head cover retaining screw(s)

WIRING DIAGRAM



INTRODUCTION: (The above installation and operation instruction including wiring diagram for AC 21 22/23/24 can be use for the AC11/12/13/14). The AC11/12/13/14 is a self contained, single door, pin operated access control system.The AC11/12/13/14 accepts up to 99 unique pin codes into the system. Codes 01 to 10 are the master pin codes and will operate the system in both the Day and the Night Modes of operation. Codes 11 to 99 will only operate the system in the Day and Bypass Mode. It is important to keep an accurate record of the pin codes slot number and its assigned system user. Then, if a pin is lost or stolen, the code can be deleted from the relevant slot.

MOUNTING INSTRUCTIONS:

Use a Cross head screwdriver to remove the cross head screw(s) holding the cover to the cabinet. Using the key way provided at the bottom of the back plate, pry the cover off the cabinet. Mount the cabinet to the wall adjacent to the entrance to be controlled.

The AC-11/12 may be mounted directly to a US style electrical box whereas AC-14 may be mounted directly to a European style electrical box via the mounting holes provided in the cabinet. All the four models may be mounted directly to a wall, you don't need to take away the backplate in any case.

WIRING INSTRUCTIONS:

Important: Before proceeding you must check that the power supply is disconnected from the mains.

Thread a four wire low voltage telephone cable to the terminal block and connect the wires as follows (**see diagram below**):

Wire No. 1: connect one end to the positive (+) terminal on the controller. The other end connects to the 12 Volt DC positive output of the Plug Pack,

Wire No. 2 connect one end to the negative (-) terminal on the controller. The other end connects to the 12 Volt DC negative output of the Plug Pack.

Wire No. 3: fix one end to the lock terminal on the controller and the other end to the lock.

Wire No. 4: fix one end to the bell terminal on the controller and the other end to the BL-01. *Sold separately. After the wiring is complete, snap the cover back to the cabinet and replace the cover retaining screw(s).

Note! If a higher level of security is required, use the T-10 security screw(s) attached to the cabinet in place of the cross head screw. T-10 screwdriver is sold separately.

MODES OF OPERATION

The AC-11/12/13/14 has 3 Modes of Operation

- 1) Day mode. A digitalEntry code is required to gain entry. The MODE LED is GREEN
- 2) Bypass Mode. The door is locked but pressing the door bell button will release the locking device. The MODE LED is ORANGE.
- 3) Night Mode. All User codes are locked out except for Master codes 01 through 10. The MODE LED is RED.

CHANGING THE MODES OF OPERATION:

Changing From **Day Mode to Night Mode:**

- 1) Enter your 4 digit Day/Night Code. (3838 is the initial Day/ Night Code) The MODE LED will flash RED.
- 2) Press the # Key The MODE LED will turn RED.

Changing From Night Mode to Day Mode:

- 1) Enter your 4 digit Day/Night Code. (3838 is the initial Day/ Night Code) The MODE LED will flash GREEN.
- 2) Press the # Key. The MODE LED will turn GREEN.

Changing From Day Mode to Bypass Mode:

- 1) Enter your 4 digit Day/Bypass Code. The MODE LED will flash ORANGE

- 2) Press the # Key. The MODE LED will turn ORANGE.

Changing From Bypass Mode to Day Mode:

- 1) Enter your 4 digit Day/Bypass Code. The MODE LED will flash GREEN.
- 2) Press the # Key. The MODE LED will turn GREEN.

PROGRAMMING THE AC-11/12/13/14:

The Programming Mode is used to change the following:

Program

No.	Function	Initial Setting
1)	Program System Code 1	2580
2)	Program System Code 2	0000*
3)	Program Programming Code	1234
4)	Program Day/Night Code	3838
5)	Program Day /Bypass Code	0000*
6)	Program Door Release Time	(10 Seconds)
61	Program Fail Secure/Fail Safe	Fail Secure
6	Program Tamper Alarm Time(0 Minutes)	
7;	Enroll user codes	
8)	Delete user codes	

*0000 deletes a function

Note! You must be in DAY MODE to program the controller. The Mode LED will be Green. Wrong or timed out entries will reset the controller to the DAY MODE condition.

1) CHANGING SYSTEM CODE 1:

- a) Press # for 2 seconds. There will be a long beep and the MODE LED will turn OFF. The DOOR LED will be RED.
- b) Enter your 4-digit Programming Code. (1234 is the initial Programming Code.) The DOOR LED will turn GREEN. The MODE LED will be OFF.
- c) Press 1. THE DOOR LED will remain GREEN and the MODE LED will turn RED.
- d) Enter the new 4-digit code you wish to set as System Code 1. There will be 3 beeps and the system will go back to DAY MODE.

2) CHANGING SYSTEM CODE 2:

- a) Press # for 2 seconds. There will be a long beep and the MODE LED will turn OFF. The DOOR LED will be RED.
- b) Enter your 4-digit Programming Code. (1234 is the initial Programming Code.) The DOOR LED will turn GREEN. The MODE LED will be OFF.
- c) Press 2. The DOOR LED will remain GREEN and the MODE LED will turn ORANGE.
- d) Enter the new 4-digit code you wish to set as System Code 2. There will be 3 beeps and the system will go back to DAY MODE.

3) CHANGING THE PROGRAMMING ING CODE:

- a) Press # for 2 seconds- There will be a long beep and the MODE LED will turn OFF. The DOOR LED will be RED.
- b) Enter your 4-digit Programming Code. (1234 is the initial Programming Code.) The DOOR LED will turn GREEN. The MODE LED will be OFF.

- c) Press 3. THE DOOR LED will remain GREEN and the MODE LED will turn GREEN.

- d) Enter the new 4-digit code you wish to set as the new Programming Code. There will be 3 beeps and the system will go back to DAY MODE.

4) CHANGING THE DAY/NIGHT CODE:

- a) Press # for 2 seconds. There will be a long beep and the MODE LED will turn OFF. The DOOR LED will be RED.
- b) Enter your 4-digit Programming Code. (1234 is the initial Programming Code.) The DOOR LED will turn GREEN. The MODE LED will be OFF.
- c) Press 4. The DOOR LED will remain GREEN and the MODE LED will flash RED.
- d) Enter the new 4-digit code you wish to set as the Day/Night change code. There will be 3 beeps and the system will go back to DAY MODE.

5) CHANGING THE DAY/BYPASS CODE:

- a) Press # for 2 seconds. There will be a long beep and the MODE LED will turn OFF. The DOOR LED will be RED.
- b) Enter your 4-digit Programming Code. (1234 is the initial Programming Code.) The DOOR LED will turn GREEN. The MODE LED will be OFF.
- c) Press 5. The DOOR LED will remain GREEN and the MODE LED will flash ORANGE.

Note! The Day/Bypass Code also controls the Chime function of the controller. Chime and bell functions are available when the controller is connected to the optional BL-01. There are 4 options this Code may be set for.

Option 1: Disable Bypass Mode - Disable Chime:

- d) Enter 0000. This will disable both Bypass Mode function and the Chime function. There will be 3 beeps and the system will go back to DAY MODE.

Option 2: Disable Bypass Mode - Enable Chime:

- d) Enter 0001. This will disable the Bypass Mode function and enable the Chime function for Day Mode. There will be 3 beeps and the system will go back to DAY MODE.

Option 3: Enable Bypass Mode - Disable Chime:

- d) Enter a 4-digit code ending with the digit 0. This will enable the Bypass Mode function and disable the Chime function. There will be 3 beeps and the system will go back to DAY MODE.

Option 4: Enable Bypass Mode - Enable Chime:

- d) Enter a 4-digit code ending with any digit except 0. This will enable the Bypass Mode function and enable the Chime function for both Day Mode and Bypass Mode. There will be 3 beeps and the system will go back to DAY MODE.

6) CHANGING THE DOOR RELEASE TIME:

- a) Press # for 2 seconds. There will be a long beep and the MODE LED will turn OFF. The DOOR LED will be RED.
- b) Enter your 4-digit Programming Code. (1234 is the initial Programming Code.) The DOOR LED will turn GREEN. The MODE LED will be OFF.
- c) Press 6. The DOOR LED will remain GREEN and the MODE LED will flash GREEN.

Note! This is a 4-digit code. The first digit signifies if the unit is to be used for fail secure (factory default setting) or fail safe operation. The second digit signifies the length of time in minutes the tamper alarm will sound if the controller is connected to an optional BL-01. The last 2 digits signify the time the door release will be activated (From 01-99 seconds)

- d) **For Fall Secure Operation:** Enter 0 for the first digit.

For Fail Safe Operation: Enter 1 for the first digit.

a) **For Tamper Alarm** If the controller is connected to the optional BL-01, an alarm will sound and the unit will flash if the cover of the controller is removed. Enter 0 to 9 for the second digit to set the alarm sound time from zero to 9 minutes (there will be no siren if you enter 0). The BL-01 will continue to flash until a valid code is entered into the controller.

f) **For Door Release Time** Enter the number of seconds you want the door release to remain activated (Example 0512 means fail secure with a 5 minute tamper alarm sound time and a 12 second door release) There will be three beeps and the system will go back to Day Mode.

7) ENROLLING PROXIMITY CARDS:

Note: Each code is a unique 4-digit number and only can be assigned to one slot at any time, Once a code is assigned to a slot, another code cannot be assigned to that slot unless the assigned number is deleted.

- a) Press # for 2 seconds. There will be a long beep and the MODE LED will turn OFF The DOOR LED will be RED.
- b) Enter your 4-digit Programming Code. (1234 is the initial Programming Code.) The DOOR LED will turn GREEN. The MODE LED will be OFF.
- c) Press 7. The MODE LED will turn GREEN and the DOOR LED will turn ORANGE.
- d) Enter the 2-digit slot code you wish to assign to the system user (for example "03" represents slot "3") The DOOR LED will remain ORANGE and the MODE LED will start to flash GREEN.

Note! The controller will not accept codes that are already allocated to a slot, it will signal this with a long beep. You must delete the old code before you can enroll a new one.

- e) Enter the 4 digit number designated for this slot number to the reader. The unit will beep once and the MODE LED will stop flashing.
- f) To enroll another user code, enter the 2-digit slot code you wish to assign to the next system user. The MODE LED will start to flash.
- g) Enter the 4 digit number designated for this slot number to the reader. The unit will beep once and the MODE LED will stop flashing.

Continue enrolling user codes in this manner until all the codes are enrolled.

- h) When finished enrolling pins, press the # key. There will be a long beep and the controller will return to the Day Mode.

Note! If the programming period times out before you press the # key, the controller will return to the DAY MODE. However, any enrolled cards in this period will remain valid.

8) DELETING USER CODES:

- a) Press # for 2 seconds. There will be a long beep and the MODE LED will turn OFF. The DOOR LED will be RED.
- b) Enter your 4-digit Programming Code. (1234 is the initial Programming Code.) The DOOR LED will turn GREEN. The MODE LED will be OFF.

- c) Press 8. The MODE LED will turn RED and the DOOR LED will turn ORANGE.
- d) Enter the 2-digit slot code you wish to delete from the system.
There will be 2 beeps and the MODE LED will start to flash RED.
- e) Enter your 4-digit Programming Code (this last step confirms that you intentionally want to delete a user from the system). The system will then revert back to DAY MODE.

If additional codes need to be deleted then repeat steps 8a) to 8e).

Important! Ensure that your record of system users and their assigned system slot numbers are stored in a secured location. Then if you wish to delete a lost or stolen code from the system, you can identify it easily from your record.

SYSTEM CODE AND USER CODE IN NIGHT MODE:

To obtain a higher level of security for entry during the Night Mode, the controller may be set to require both a 4-digit System Code 2 AND a valid Master user Code. (Code 01 to 10). Assign any 4-digit number other than 0000 to the System Code 2 (refer to instruction 2) and the controller will not allow entry in the Night Mode unless the 4-digit number for System Code 2 is entered and followed by a valid Master user Code. (Codes 01 to 10)

TO GAIN ENTRY IN THE NIGHT MODE:

- a) Enter the 4-digit System Code 2. The reader will beep 3 times acknowledging your entry. The MODE LED will remain RED.
- b) Present a valid Master user code to the controller. The system will beep 1 time. The DOOR LED will turn GREEN. The lock release relay will activate.

TO REPLACE LOST PROGRAMMING CODE:

In the event that the Programming Code is lost, the controller may be reprogrammed in the field using the following instruction:

CONTROLLER IN DAY MODE:

- 1) Remove Power from the controller.
- 2) Depress the Internal Door Release (Request to Exit) Button.
- 3) Apply power to the unit with the Door Release Button pressed.
- 4) Release the Door Release Button.
- 5) You now have 15 seconds to program a new Programming Code into the unit using the initial default code 1234, before the controller reverts to the existing code.

CONTROLLER IN NIGHT MODE:

- 1) Remove Power from the controller.
- 2) Depress the Internal Door Release Button.
- 3) Apply power to the unit with the Door Release Button pressed.
- 4) Release the Door Release Button.
- 5) You now have 15 seconds to use the default code 3838 to return the system back to DAY MODE. Then use the programming instructions for a controller in DAY MODE above to reset the programming code.

EMERGENCY OVER RIDE FUNCTION

Should it be desired to have the Access Control system be remotely bypassed (Example: connected to an emergency Evacuation System) placing a short across terminals (-) and Rex/Bell (Request To Exit button terminals) will cause the controller to release for as long as the short exists. If the optional BL-01 is connected, the light will flash after a short condition exists for more than one minute.