2 Wire Digital Video System

Installation Manual



Introduction

The Atigo door entry system is a simple 2 wire solution that can be expanded up to 4 entrance panels and 32 internal monitors.

Programming of the camera module is done via built in DIP switches and touch keys.

The camera module has built in visual and audible status indictors as well as white LED for night view.

Important notes:

Maximum of 4 monitors can be connected to a single call button

Maximum of 4 monitors can be connected in daisy chain configuration

Maximum of 8 monitors can be connected to a single A2200 in distributor mode (DIP switch 1 OFF)

Maximum of 4 A2200 units can be connected to single A2200 in raiser mode (DIP switch 1 ON)

Cable distances

CABLE TYPE	А	В	С
Twisted Cores CAT5e*	40	40	30
Belden 8762 or equivalent	60	60	30
Twisted Cable 2 x 0.75 mm2	60	60	30
Twisted Cable 2 x 1.00 mm2	80	70	30

*CAT5e UTP, cores twisted by colour code.

Twist the cores of CAT5e-UTP as shown in the image:

- White with colour cores
- Solid colour cores



Video camera module A3101



Specifications:

Power supply: 26Vdc (supplied by A2101 / A2102)

Power Consumption: 1W standby, 5W active

Unlock Power output: 12Vdc, 250mA

Unlock time: 1~99s

Working temperature: 20°C ~ +55°C

Dimensions: 83(H) x 100(W) x 38(D)mm

A3101 Terminals

1. SET

DIP switches for system configuration.

2. JP-LK

Jumper for setting state of the $\ensuremath{\text{NO}}$ contact

3. CN/KMB

Digital display module connection port

4. CN/T-COIL

Not in use

5. BUS

L1, L2 bus line connecting to terminal BUS(DS) on the power supply

6. CN-LK

- +12V 12VDC power output.
- LK- Power ground.
- LK+ Common contact of the relay.
- NO Normally open/closed contact (use JP-LK jumper to set)
- EB+ Exit button connection port.
- EB- Exit button connection port.

7. CN/FUN

Not in use

8. CN/WGN



Not in use

DIP switch settings for A3101

The system can be expanded up to 4 entrance panels and 32 internal monitors

The video module is configured by 6 DIP switches.

The DIP switches can be modified either before or after installation. Restarting the camera module is necessary whenever the DIP switches have been modified.



DIP switches 1 and 2 are for door station(s) ID settings.

When multi door stations are installed on the system, these two DIP switches must be set correctly.

Door station DIP switch setting:

No.1 = 00 (Default setting)

No.2 = 10

No.3 = **01**

No.4 = **11**

DIP switch 3 needs to be set to 0 for mechanical call button operation.

DIP switch 4 is for call button automatic allocation. Call buttons are automatically assigned to the indoor units. The default setting for this DIP switch is 0

DIP switch 5 is for setting door unlock time. 0 is the default setting for one second delay and 1 is the setting for five seconds delay.

DIP switch 6 is for activating keys A and B which are used for programming camera module functions (see next section).

The default setting for this DIP switch is 0.

Video module functions and programming



Restore factory settings

Warning:

All settings will be deleted if the **Restore Factory Setting** is activated.

When the **Camera Module** is in standby, short out the Exit Button Port (EB+, EB-) and toggle DIP switch 6 four times. A long Beep will sound and all three indicators will blink at the same time meaning the **Restore Factory Setting** is in progress.

Once the three Indicators turn off with a warning sound of a long Beep, it means the **Restore Factory Setting** is complete.

Activating touch keys, A and B

Key A and key B cannot be used on the camera module until activated.

To activate the keys and set the unit to programming mode, put DIP switch 6 to ON position.

DIP switch 6 must be set to ON while the others are set to OFF to program module.

When programming is finished, put DIP switch 6 back to OFF position to go back to standby.

Electric lock mode setting

When the **Camera Module** is in Programming mode:

- 1. Press Key A, the **Unlock Indicator** will turn on with the warning sound of a long Beep followed by a short Beep
- 2. Press Key A again to select mode

a. Mode = 0 (default)

Normally Open: The **Status indicator** blinks once with the warning sound of a single long Beep

b. Mode = 1

Normally Closed: The **Status indicator** blinks twice with the warning sound of a long Beep followed by a short Beep.



Lock time delay setting

When the **Camera Module** is in programming mode:

- 1. Press Key A. The **Unlock indicator** turns on with the warning sound of a long Beep followed by a short Beep.
- 2. Press Key B and hold for desired lock opening time.

The **Unlocking Time** delay is indicated by the number of times that the **Status indicator** blinks (set in seconds). For example: The **Status indicator** blinks four times, that means the unlocking time is 4 seconds.



Sound setting

When the **Camera Module** is in programming mode:

- Press and hold Key A for 3 seconds to enter the Sound Option Mode, the Status indicator will turn on and the current sound will play.
- 2. Press Key A again to play the next tune
- 3. Press Key B to exit.



Sound volume setting

When the **Camera Module** is in programming mode:

- 1. Press Key B to enter **Tune Volume Setting**, the **Talk indicator** will turn on and play the sound at the current volume.
- 2. Press Key A to increase/decrease the volume (loop setting)
- 3. Press Key B to exit.



Talk volume setting

- During the conversation, press and hold Key B for 3 seconds to enter the Talk Volume Setting. The Talk indicator will turn on with a long Beep followed by a short Beep.
- 2. Press Key A to increase/decrease the volume (loop setting).
- 3. Press Key B to exit.



Electric lock (internal power)

Electric lock output is limited to 12Vdc, and a maximum current of 250mA.

Jumper setting JP-LK:

- 1-2 Normally closed mode
- 2-3 Normally open mode

Electric lock (external power)

- 1. Open contact output is limited to 24Vdc, and a maximum current of 1000mA.
- 2. The jumper must be taken off before connecting.
- 3. Set lock type using touch keys A and B

(see module programming)

Fail Locked - Mode = 0 (default)



Fail Unlocked - Mode = 1



Fail Locked

12Vdc 250mA



Fail Unlocked



Digital keypad module A3202



Digital keypad module is designed as a digital call module and as a stand-alone access control keypad for a secure PIN entry with up to 40 pin codes capacity.

Use programming table for programming user pin codes and other functions and features.

Use # to confirm and to cancel.

If no button is pressed for 10 seconds keypad will automatically exit programming mode

Example of adding new user code: 2525

Enter Master Code #1234#

Enter Location Code C: 20#

Enter user PIN value V: 2525#

* Press to finish and exit

Combination example:

1234 # 20 # 2525

Press # 2525 # to test and release the lock

Programming Table

Function	Location Code C:	Option Value V:	Default Value
Reset all settings	00	1234	1234
Set master code	01	1~12 digits	1234
Keys illumination time	02	10~99 sec. / constantly lit 00	10 sec.
Lock unlock time	03	01~99 sec.	1 sec.
Lock operation mode	04	0 : open 1 : closed	0 : open
Keys tone settings	05	0 : on 1 : off	0 : on
Delete all user PIN codes	06	1234	1234
* and # key order	07	0 : Normal 1 : Reverse	0 : Normal
Call tone settings	08	0 : on 1 : off	0 : on
Speech volume settings	11	1~9 low ~ high	5
Night light level	13	0~5 low ~ high	4
Temporary user PIN Relay 1	18	1~12 digits	_
Temporary user PIN Relay 2	19	1~12 digits	_
User PIN Relay 1	20~59 max. 40 codes	1~12 digits	_
User PIN Relay 2	60~99 max. 40 codes	1~12 digits max. 40 codes	_

Digital display module A3203



Digital display module is also design as a proximity card reader with up to 320 user tags capacity. Reader supports 125KHz and 13.56MHz unencrypted RFID tags

Use supplied master tags to add and delete user tags.

Programming Tags

Add user tags

- In standby mode present MASTER CARD <u>ADD</u> tag to card reader
- 2. Use keypad to enter room number new user tag need to be associated with and press **#** to confirm.
- Tap to add all user tags associated with selected room.
- Repeat steps 2 and 3 to add more user tags
- 5. Present MASTER CARD <u>ADD</u> tag to finish.

Delete specific user tags

- In standby mode present MASTER CARD <u>DELETE</u> tag to card reader.
- Present user tag you wish to delete to card reader. Or use keypad to enter room number you wish to remove all user tags from and press # to confirm.
 Propert stops 2 to remove more
- 3. Repeat steps 2 to remove more user tags.
- 4. Present MASTER CARD <u>DELETE</u> tag to finish.

Delete all users and tags

- In standby mode present MASTER CARD <u>DELETE</u> tag to card reader, wait for double beep.
- Present MASTER CARD <u>ADD</u> tag to card reader, wait for double beep.
- Once more present MASTER CARD <u>ADD</u> tag to card reader, wait for single beep.
- 4. Wait 10 seconds for reader to return to standby mode.

Program new MASTER CARD tags

- 1. Make sure all modules are connected and powered up.
- Link together wires EB+ and EB on audio/video module and wait for a beep
- 3. Switch ON and OFF DIP switch 4, four times, wait for double beep.
- 4. Wait 10 seconds for reader to return to standby mode.

Backup and restore

Audio/Video module is design to store programmed information about user door numbers, proximity tags and pin codes.

All information stored by the module can be backed up and restored if necessary.

E.g.lf keypad's Master PIN code is lost and entire panel need to be reset to default.

Backup procedure

- 1. Make sure all modules are connected and powered up.
- 2. Insert Micro SD card into the speech module.
- Press and hold button A on the speech module for 10 seconds and release when you hear the beep, and all lights turn on.
- 4. Wait until you hear another beep, and all lights turn off.
- 5. Back is now complete.

Restore procedure

- 1. Make sure all modules are connected and powered up.
- 2. Insert Micro SD card into the speech module.
- Press and hold button B on the speech module for 10 seconds and release when you hear the beep, and all lights turn on.
- 4. Wait until you hear another beep, and all lights turn off.
- 5. Restore is now complete

Restore to factory default

Caution!

When using this procedure all information will be lost and modules restored to default factory settings.

You can reset Master PIN code without losing all information by following backup and restore procedure.

Once back up procedure is complete make sure to remove file PASSWORD.BIN from Micro SD card as this file holds old mater code information.

Factory default procedure

- 1. Make sure all modules are connected and powered up.
- 2. Link together wires EB+ and EB on audio/video module.
- On Switch ON and OFF DIP switch 6 four times then disconnect wires EB+ and EB – .

Speech module will beep, and all indicators will turn on. After about 15 seconds module will beep again, and all indicators will turn off.

4. All settings are now back to factory default.

System layout - Distributor mode



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System layout - Riser mode



