Knowledge Base

KB – LTK28xx Access Controller Reading Guide

Text: Jimmy Wang

This reading material is for internal training purposes. For all legal warnings and instructions, please refer to the official access control user manual. Please visit our LTS website for more information.. Link Access Control Tutorial Video: Link

LTS releases two Access Control Controllers

c UL us LISTED #E485225

LTK2802 Access Control for 2 Doors

LTK2804 Access Control for 4 Doors

LTK2802
Access Control for 2 Doors

LTK2804
Access Control for 4 Doors

Before the Installation

- Please always read the official user manual.
- Access Programming software supports PC only.
- Require Internet connection for the Time Sync
- LTK Series only support Mifare Card.
- PC NVMS7000 Support up to 16 Controllers
- For security reason, no remotely unlock features.

Reading Guide

First, the Hardware, then the Software

Warnings Follow these safeguards to prevent serious injury or death.

Cautions Follow these precautions to prevent potential injury or material damage.

All the electronic operation should be strictly compliance with the electrical safety regulations, fire prevention regulations and other related regulations in your local region. Please use the power adapter, which is provided by normal company. The power consumption cannot be less than the required value. Do not connect several devices to one power adapter as adapter overload may cause over-heat or fire hazard. Please make sure that the power has been disconnected before you wire, install or dismantle the device. When the product is installed on wall or ceiling, the device shall be firmly fixed. If smoke, odors or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center. If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the device yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

Installer License Requirements for Business environments:
Low Voltage Installation – C7 License
Fire Alarm – C10 License
Your State/City license requirements may vary.
Please note, LTS is not responsible for any issues related to installer license requirements.

California

Low Voltage Specialty License Types:

Low-Voltage Systems C-7

Electrical Contractor
(includes Fire Alarm installations) C-10

Fire Protection Contractor C-16

Lock and Security Equipment Contractor C-28

Solar C-46

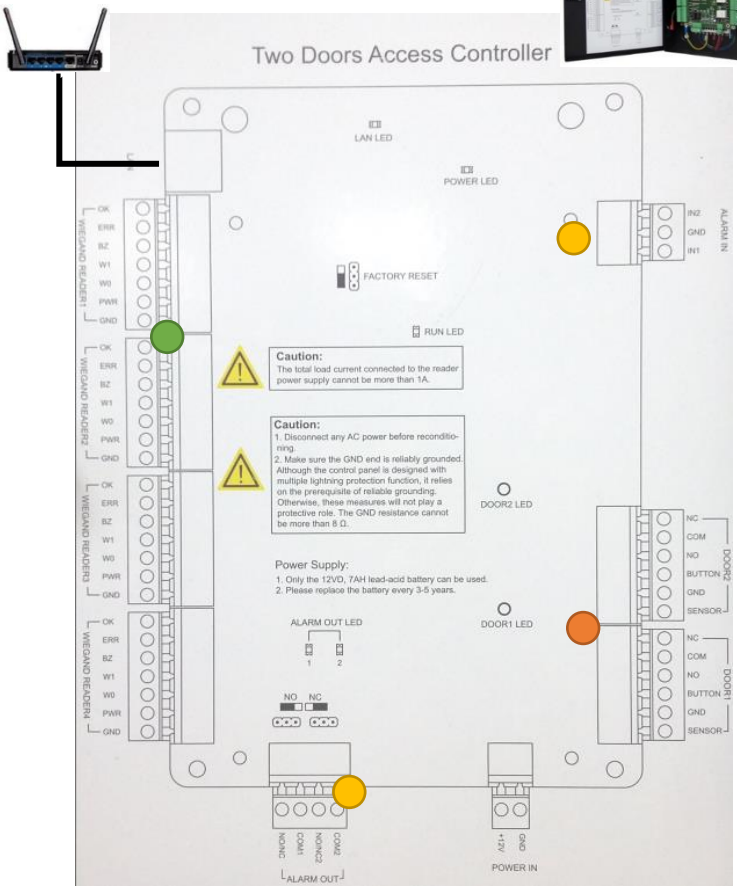
Controller Interface:

(Important) Open the side panel. There is a labeled sticker. It indicated the correct responding position and usage.
If it is different from the user manual, the sticker label is the correct answer. Please check it carefully first.

Left side: Wiegand section

Right side: Door Locks section

For the fire alarm Input / Output trigger.
(Upper right and bottom sections).
Please read the user manual for detail connection instruction.



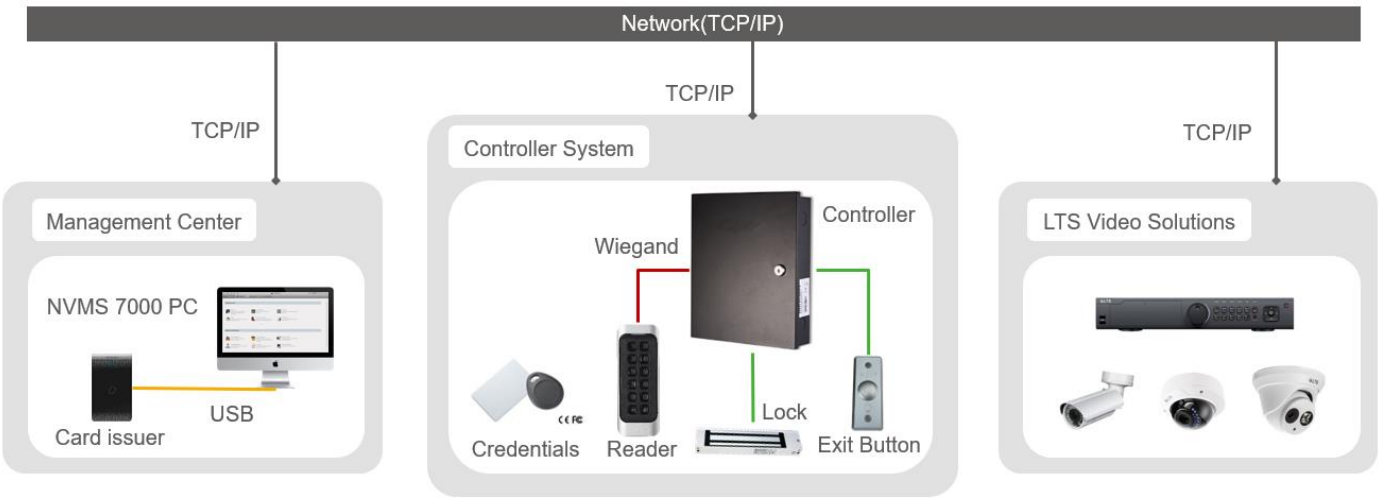
> Note:
> Door locks power must run separately.
> Controller won't support any power for door locks.
> NO/NC and COM connections are nonpowered

For
2 Doors Access Controller:
Support up to 4 Wiegand with Anti-Bypass solution.
Control in or out by using the Wiegand reader to allow the access.
For example: W1, W2 for Door1. W3, W4 for Door2.

4 Doors Access Controller: Support up to 4 Wiegand readers.
Each Wiegand only supports to one designate door number.
For example: W1 for Door1. W2 for Door2. W3 for Door3. W4 for Door4

Structures

Internet Router ------ Main Network Switch ------ PC NVMS7000
+--------- LTS NVR / DVR
+--------- LTS IP Camera
+--------- LTK280x Access Controller Box
+--------- (Additional LTK280x Box, etc...)



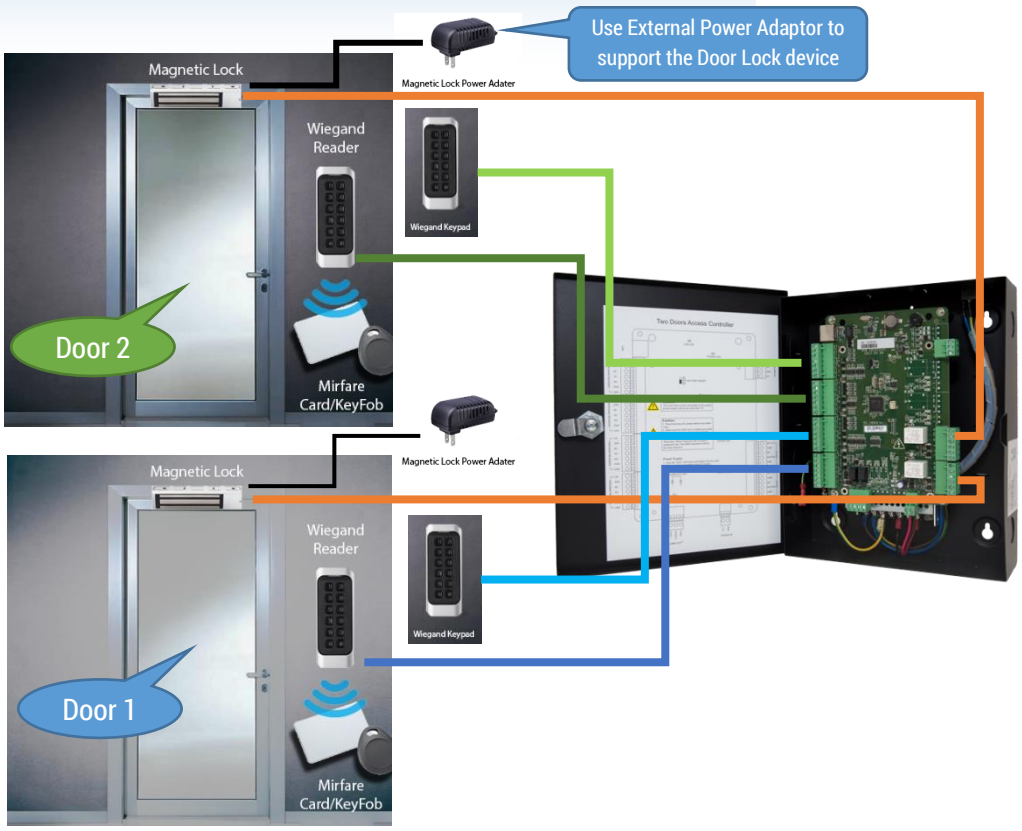
2 Doors Anti-Bypass Connection: (LTK2802)

Wiegand Reader:
Entry Wiegand Reader set as Reader 1and **Exit** Wiegand Reader (Reader 2) for each side.

Wiegand Reader uses 18/6 wires to connected. (see the next page)

Door Lock:
Door lock device uses 18/2 wires to connected.

Run door lock power separately.
Access Controller won't provide power to the door locks.



Exit Button: (See Page 6)

If Exit button is required, connect a wire (18/2) to the device.

NC	Door Lock Relay Output (Dry Contact)
COM	
NO	
BUTTON	Door Button Input
GND	Grounding
SENSOR	Door Magnetic detector

4 Doors Access Connection: (LTK2804)

4 Doors connection diagram is same as the Exit button connection.

Anti-Bypass Question:
Only 2 door can support the anti-bypass. 4 doors are not supported.

If you need anti-bypass for 4 doors, please purchase Two Sets of 2 door access controller.

Wiegand Connection:

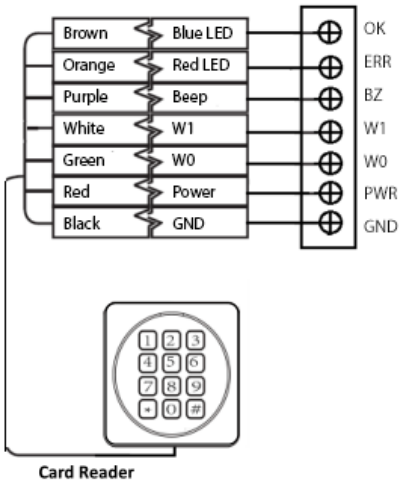
Please read the user manual. This diagrams below are for reference only.

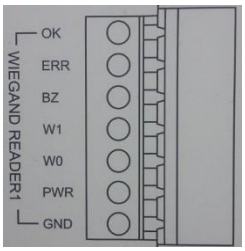
Standard Wigegand Protocol

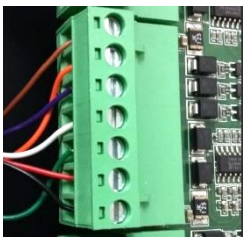
- 4 Connections (Minimum)
  2 Power (DC 12V)
  2 Data

  Wiegand 26 = 8 digit #
  Wiegand 34 = 10 digit #

By default (power on stage),
the indicator stays on red color.







If the Controller is being used to control the LED and buzzer on the Wiegand card reader, then the OK/ERR/BZ ports need to be connected.

Simply said, if you run short of the wire, don't need to connect the ERR wire (18/6).

These are the responses based on the wire connected.

OK is connected:	Valid card is scanned, the indicator light shows Green.
ERR is connected:	Invalid card is scanned, the light will flash Red 3 times.
Beep is connected:	The valid card beep twice (be-be quickly),
(see Appendix A)	invalid card will beep 3 times slowly.

ATTENTION:

Physical Dip Switches on the back of the readers need to be set prior to first use. If any changes need to be made to the DIP-Switches, the reader needs to be power reset before the DIP-Switch changes are set properly. The DIP Switch Picture is just an example, doesn't apply to LTK3500s

Most DIP Switches 1- 8 are **OFF** position by default

Set 6 to ON for Wiegand Protocol
Set 7 to ON to Wiegand 26-bit Protocol
(Default OFF for Wiegand 34-bit Protocol)

SENSOR AREA

These four reader models are designed to support Wiegand 26-bit and 34-bit Protocols

LTK1107M

LTK1107MK

LTK1103M

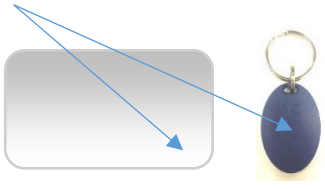
LTK1103MK

How to manually input numbers?

Enter 8 Key numbers and Press # when finished.

How to find the card number?

123,45678 (26-bit 8 Key#; no comma)
1234567890 (34-bit 10 Key#)



LTK1802M

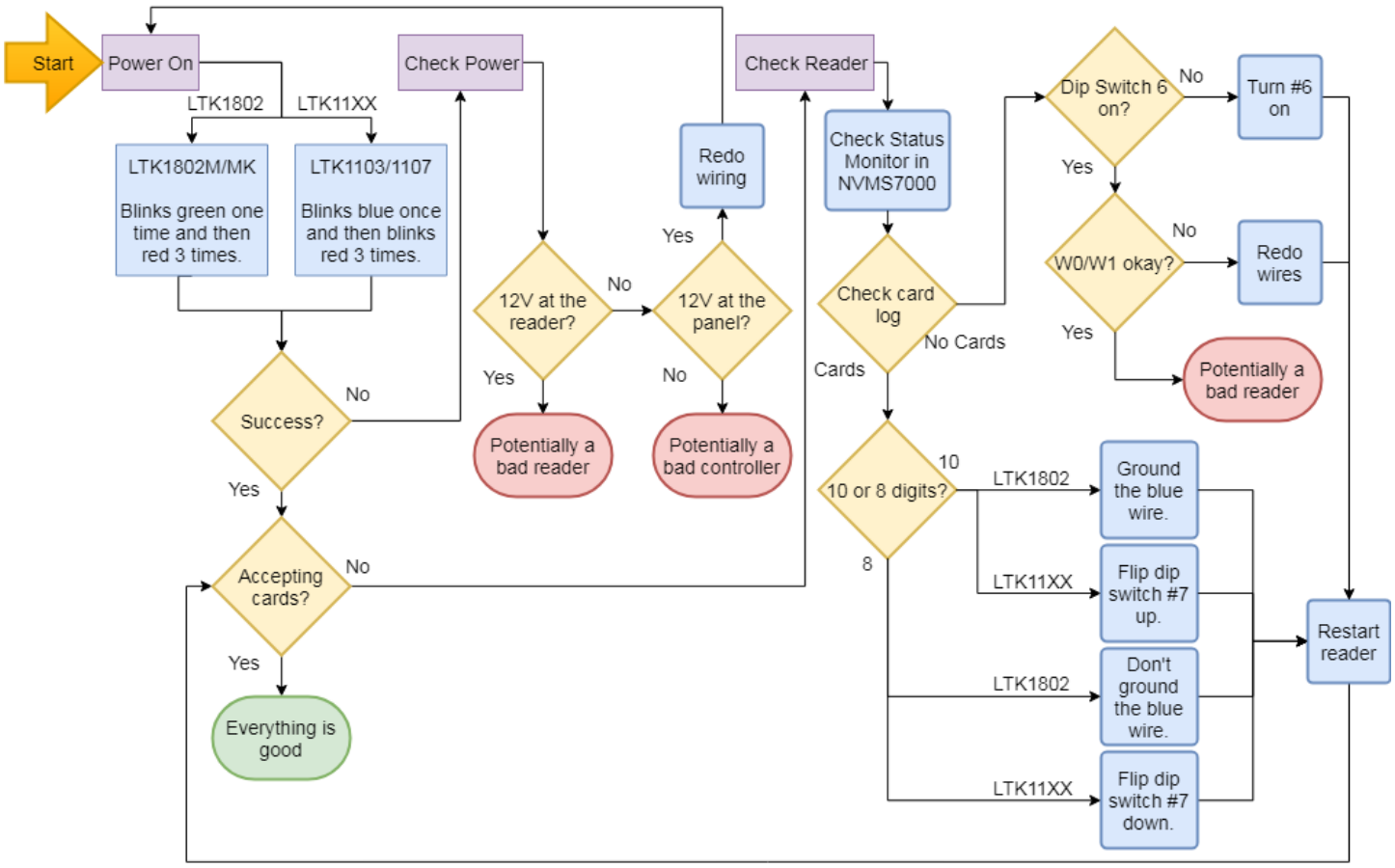
Economic Mifare Card Reader
LTK1802M
Sign In for Price
Card Reader
learn more

LTK1802MK (Wiegand 34-bit)

Economic Mifare Card Reader
LTK1802MK
Sign In for Price
Card reader with keypad
learn more

Connect the Blue cable to ground will switch from 34bit to 26bit (8 Keys)

Troubleshooting Flow Chart: Wiegand Card Reader

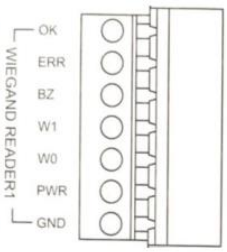


LTK1802MK

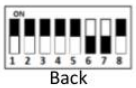
OK	Brown
ERR	Orange
BEEP	Purple
W1	White
W0	Green
12V	Red
GND	Black
26/34	Blue

(Optional)

Grounding the Blue cable will switch Wiegand bits from 34 to 26.

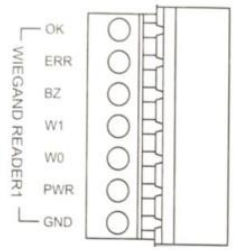


LTK1107MK

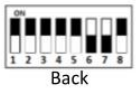


OK	Brown
ERR	Orange
BEEP	Purple
D1	White
D0	Green
12V	Red
GND	Black

(Optional)

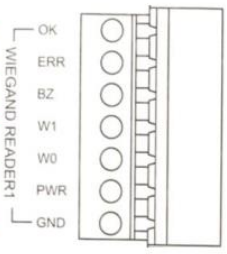


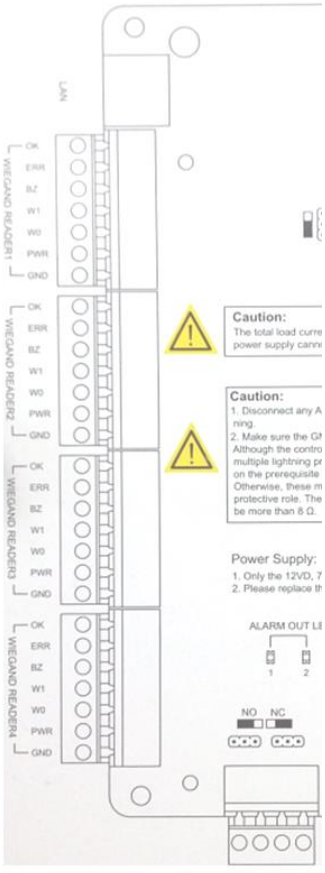
LTK1103MK



OK	Brown
ERR	Blue
BEEP	Yellow
W1	White
W0	Green
12V	Red
GND	Black

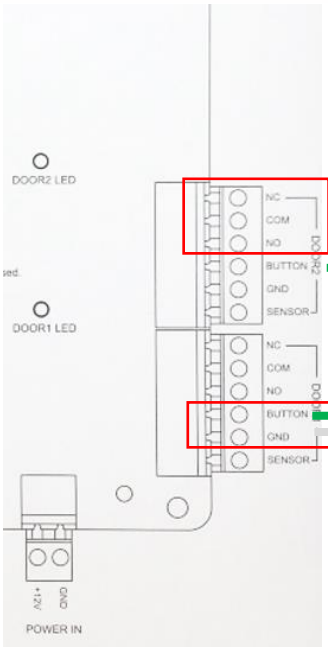
(Optional)



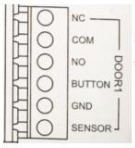


Door Lock Connection

NO - Normally Open (**No Power**, door stays locked).
NC - Normally Closed (**Power** is required to keep the door locked).



12VDC/24VAC

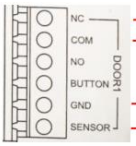


12V-DC/24VAC
12V+DC/24VAC

LTKL101

Normally Open

12VDC/24VAC



12V+DC/24VAC	
12V-DC/24VAC	
NO	
(Optional)	COM
(Optional)	NC

LTK-600LB

Normally Closed

EXIT button

Green
White

No LED / No Power Needs
Exit Button

LTKB01

LTK-REB-1
No LED / No Power Needs

LTK-RT-1(Wireless)

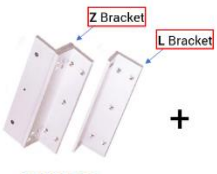
LTK-SREX-100

Green
White

LED / Sensor extra Power Needs
Exit Button

LTKB04

LTS LTKLBLZ06 - LZ Bracket for Magnetic Lock Application



LTKLBLZ06
LZ Bracket for LTKL206

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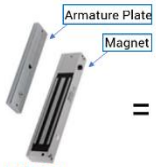

LTKL206
12V 600LB
Magnetic Lock

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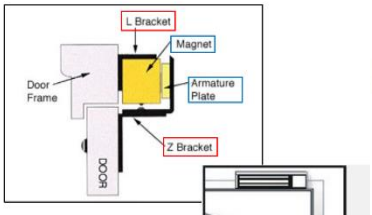
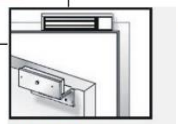




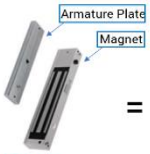
LZ-Bracket for Inswing door

LZ mounting brackets are designed to accommodate the installation of a standard **Magnetic Lock** to the pull side of hollow METAL door frame or WOOD door openings

LTS LTKLBU06 - U Bracket for Magnetic Lock Application

LTKLBU06
U Bracket for LTKL206

+



LTKL206
12V 600LB
Magnetic Lock

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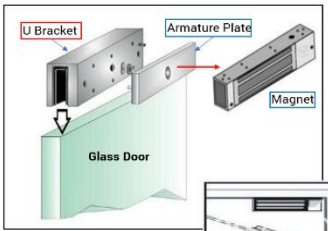
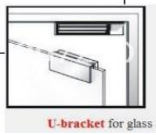




U-bracket for glass door

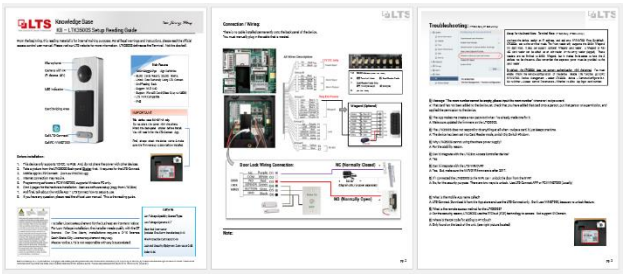
U mounting bracket are designed to accommodate the installation of a standard **Magnetic Lock** to a frameless **GLASS** door

LTK3500S

Standalone Terminal Door Access Controller with Video Camera Two ways Audio Function

Main Features

- 1920x1080p@30fps High Definition.
- 50,000 Cards Record, 200,000 Events.
- Unlock Door Remotely Using LTS Connect.
- Anti-Passing Back
- Support Wi-Fi 2.4G
- Support MicroSD Card (Class 10, up to 128GB)
- LTS NVR Compatible
- IP65



NOTE: LTK3500s defines as the Door Access Controller.Similar as the intercom remotely. However, it won't support any existing chime system. So, it is not the Doorbell camera. Must use NVMS7000 to program Wifi

Power Needs: 12V DC (1A) NO POE.
Please keep in mind the LTK3500S uses DC12V NOT AC power. Also, make sure to use 2 different DC power adapters for the lock and LTK3500S, do not share the same power

LTS Access Control

LTK2802
2 Door Controller
Up to 4 Wiegand Card Readers

LTK2804
4 Door Controller
Up to 4 Wiegand Card Readers

LTKC1356M
Smart Card
Frequency: 13.56MHz.

LTKE100ME
Plug and Play USB Mifare Card Issuer

LTK1103M
IP64

LTK1103MK
Keypad w/ 12 keys
IP64

LTK1107M
IP65

LTK1107MK
Keypad w/ 12 keys
IP65

LTK1802M
IP65

LTK1802MK
Keypad w/ 12 keys
IP65

LTK3500S
Video Access Control and Doorbell

LTK3801M
Standalone Access Control 1 Door Terminal

LTKF1356M
Key Fob
Frequency: 13.56MHz

LTKB01
Metal Button
(3.39"x3.39"x0.79")

LTKB02
Metal Button
(3.54"x1.38"x1.14")

LTKB04
Touchless Button
(3.39"x1.97"x1.34")

LTKL101
12V Electric Door Strike

LTKL206
12V 600LB
Magnetic Lock

LTKLBLZ06
LZ Bracket for LTKL206

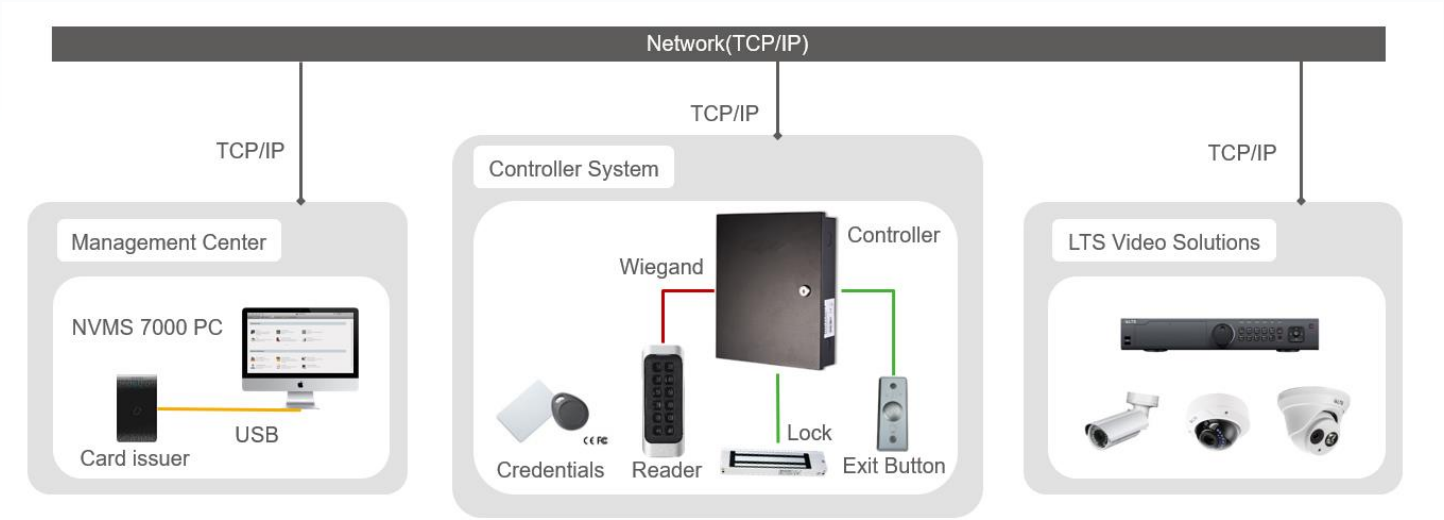
LTKLBU06
U Bracket for LTKL206

LTAC1806G-CMR
18 AWG 6 Conductor CMR Rated
Gray Stranded Shielded 500ft

Software

Access Control Software: NVMS7000

- **Max. 16 controllers / 64 doors**
- **Max. 10,000 users and 10,000 Cards**



Access Control Software: NVM7000

Note:

1. Device Activation (setting a password) is required.
2. The latest version of NVMS7000 required
3. Software supports Microsoft Windows 7/8/10 only
4. Supports Local Network Configuration.
5. Max. 16 controllers / 64 doors
6. Max. 10,000 users and 10,000 Cards

Activation: There are two ways to Activate the Controller. 1. NVMS7000. 2. IP Portal Software

(Download Link)

For NVMS7000 Activation:

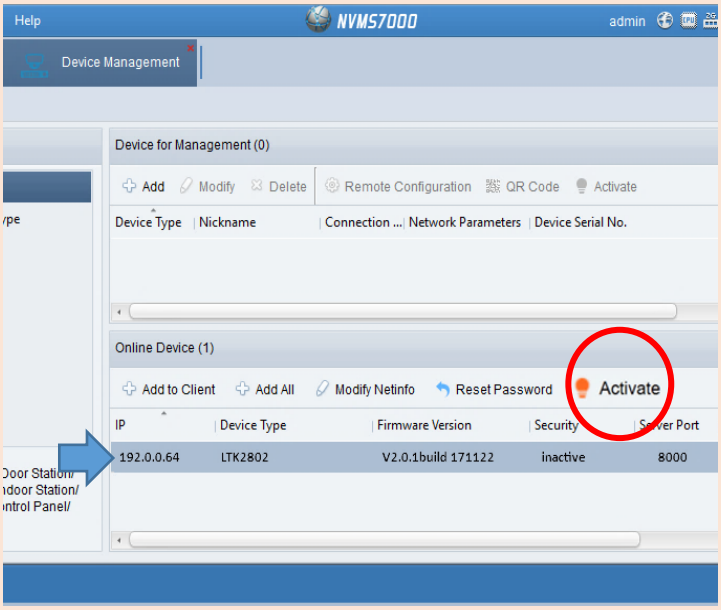
Go to **Control Panel > Device Management**

Find the Controller on the bottom list, Highlight and **Activate**

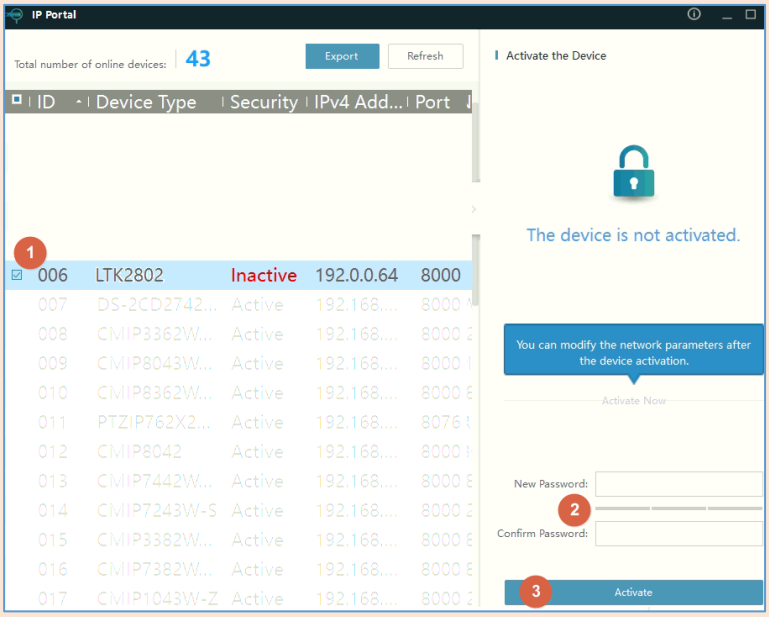
Enter Valid Password and click OK

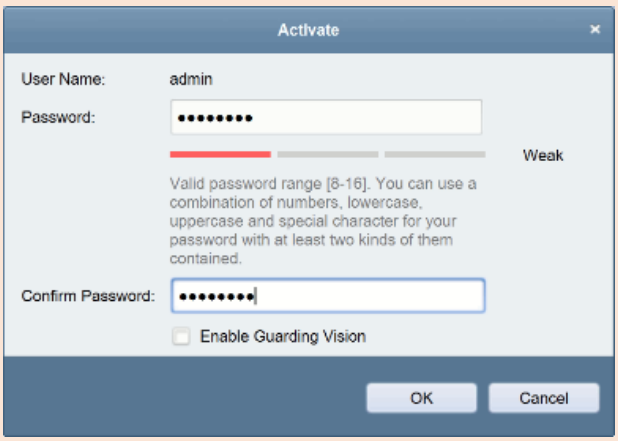
Note:
Please use the latest NVMS7000 PC software. Also, please confirm the Access Controller box firmware is up to date before you begin.

NVMS7000 Software



IP Portal Software



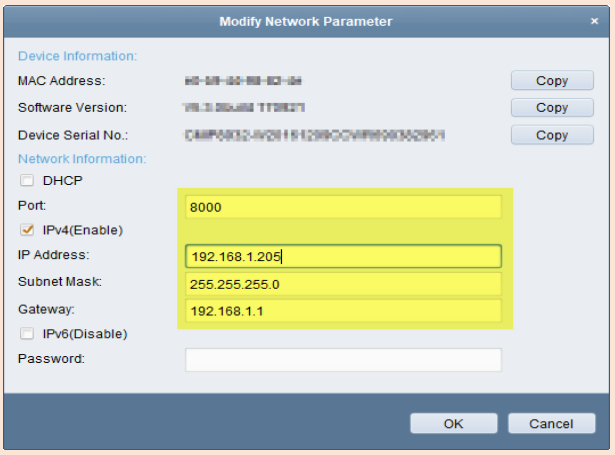


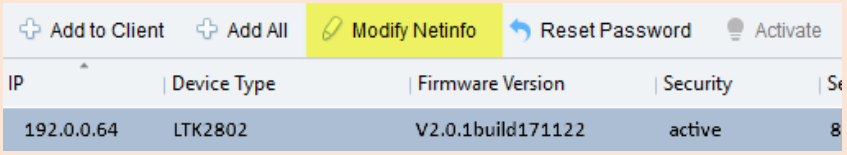
STRONG PASSWORD RECOMMENDED—
We highly recommend that a strong password is created (using a minimum of 8 characters, including uppercase letters, lowercase letters, numbers, and/or special characters) to increase the security of your device(s).

We also recommend changing your password regularly, especially in the high security system. Resetting the password monthly or weekly can help better protect your device(s).

Setup Controller Local IP Address

Before adding the device, the IP address needs to be programmed first.
Click Modify Netinfo and set up the local network IP address





Add Controller / Naming

1. Click **Add**

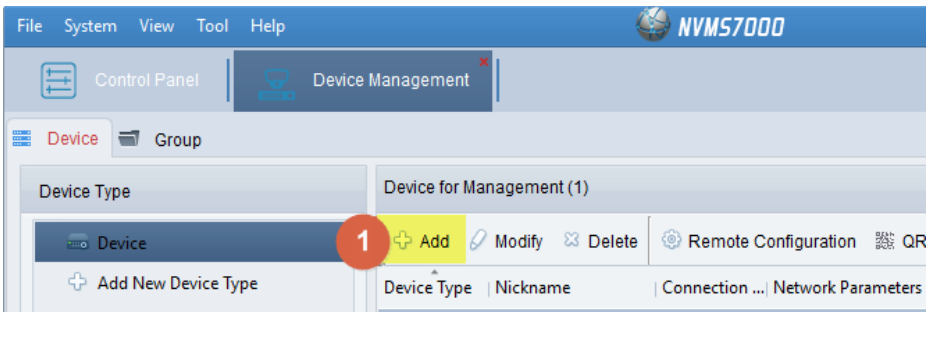
2. **Choose IP/Domain**

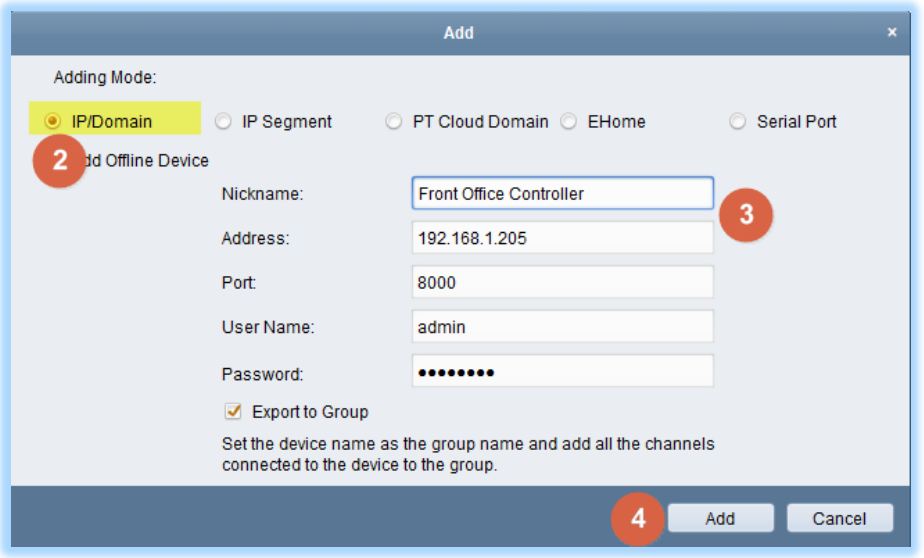
3. Enter Controller Nickname,
   IP, User & Password.

*** Important ***
Please make an appropriate nickname.
It helps to label the controller if you have more than one. (See Page 10)

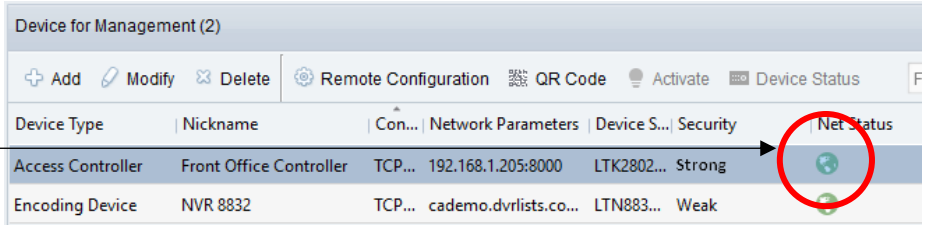
Make sure to enter the correct password before clicking Add. The password is the password that was chosen in the Activation step". The wrong password will cause the 'Export to Group' to fail. If you enter the wrong password when you are adding the device, delete the device and re-add'

4. Click **Add** when finished.





Check Connect Status:
NetStatus shows Green color. (Ready)

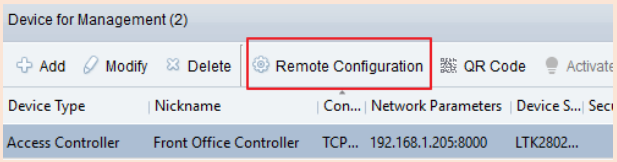


If it is not connected, please double check the connection or setting again.

Sync Time

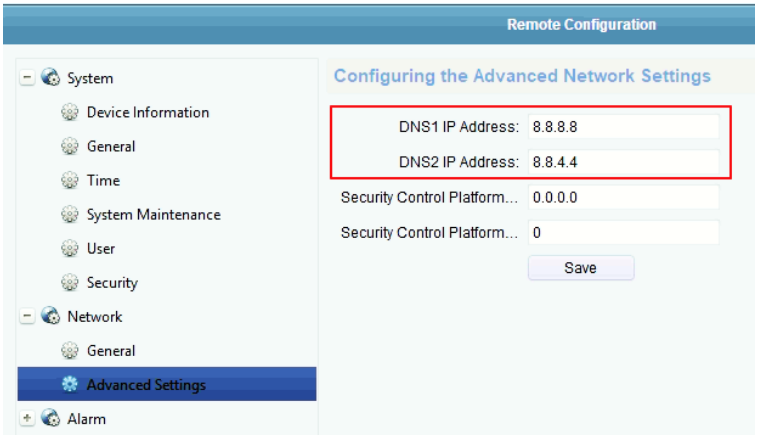
Controller's Time may not be accurate when the controller is first set up.
Please synchronize the time before use.
Manual time change currently disabled.

Synchronization requires Internet access with NTP server.



Check DNS

Highlight Controller, click **Remote Configuration** to open the controller settings:
Check **Network** > **Advanced Settings**.
Make sure DNS set correctly.
If it is 0.0.0.0, change to 8.8.8.8. Click **Save.**

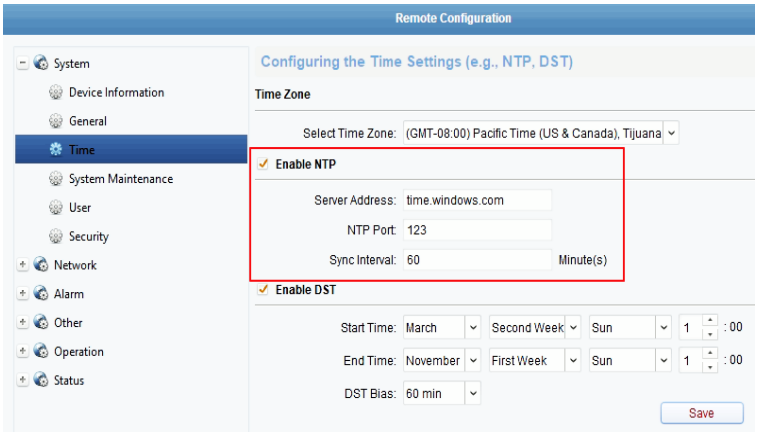


Enable NTP

Go to **System** > **Time.**

Checkmark Enable NTP
Enter Server Address (if empty): time.windows.com
NTP Port: 123
Sync Interval: 60
(After Sync Successful, you may change Interval to 1440 avoid Sync too often)

Check that DST Settings are correct, **Save**
(Link)

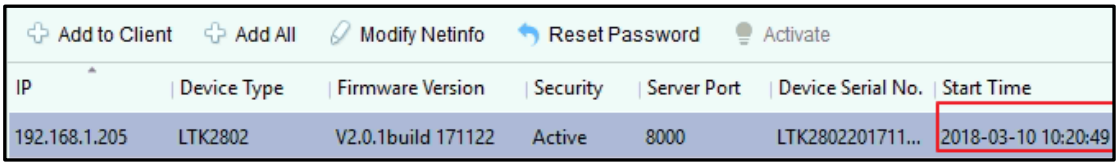


Reboot

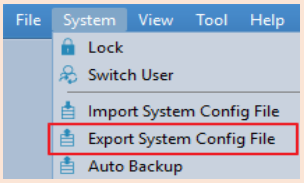
Go to **System > System Maintenance > Reboot** After reboot, controller time should be correct. Please double check the status bar message.

Check Time

How to check the Controller Current Time?
Go to the bottom section under Device Management. The Controller Start Time = Current Time. Press refresh & check.



Important, Backup the Settings!



Backup Settings becomes more important when you try to program the Access Control.
Always back up the settings! Backup (Export) settings are located in the System Menu bar option"

Use Export System Config File to backup your settings file INCLUDING the Access Control Database, Permission and Attendance settings, as well as other vital information. Please remember to keep this file secure.
Use **Import System Config File** to restore the settings.

Auto Backup is a new feature. The settings back are backed up according to a set schedule.

Label / Name (Door):

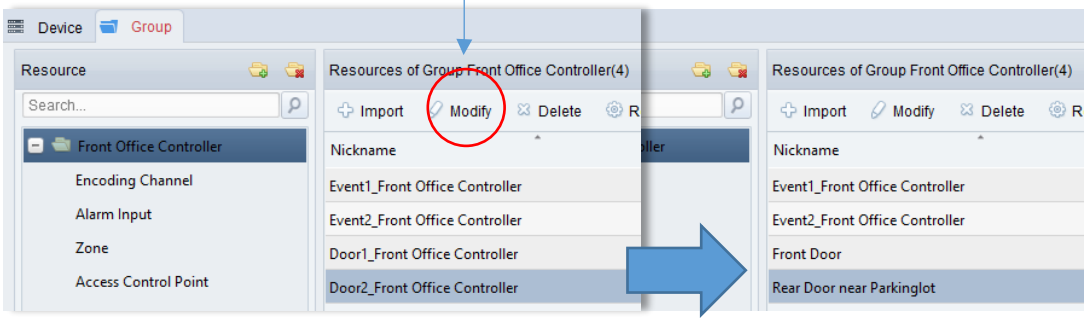
Clearly labeling the different access control components will make the job easier when you try to setup or manage the system after the system has been installed.

Labeling/ Naming Door

Device Management > **Group**.
Highlight the door device, click **Modify**.

By default, it is named as Door#_(Controller Name)

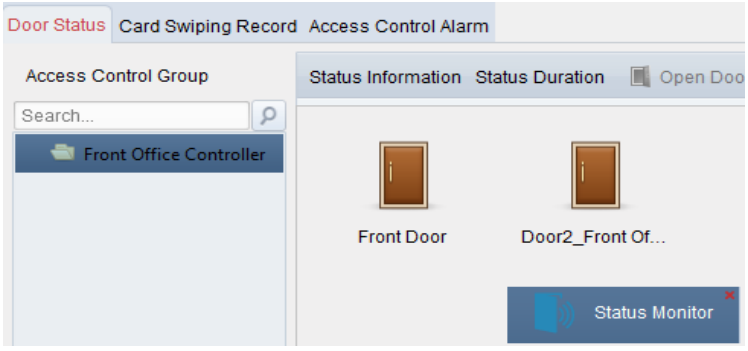
It is recommended to change the default name to a more appropriate name.

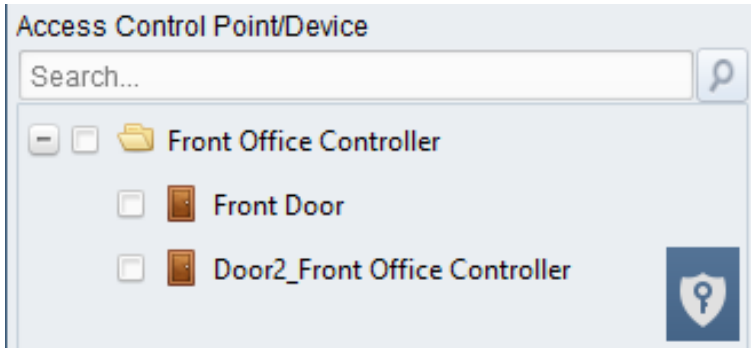


For example:

Door1 to Front Door
Door2 to Back Door

From the picture on the right, the importance of clear labels is shown.



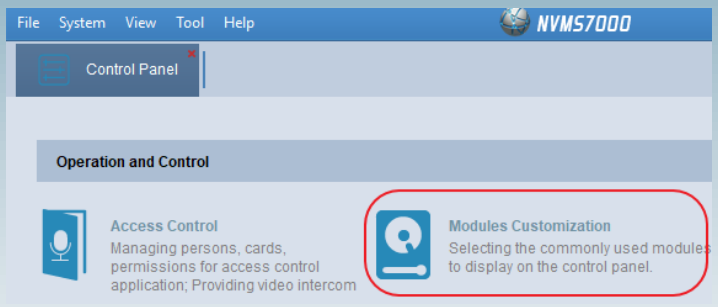


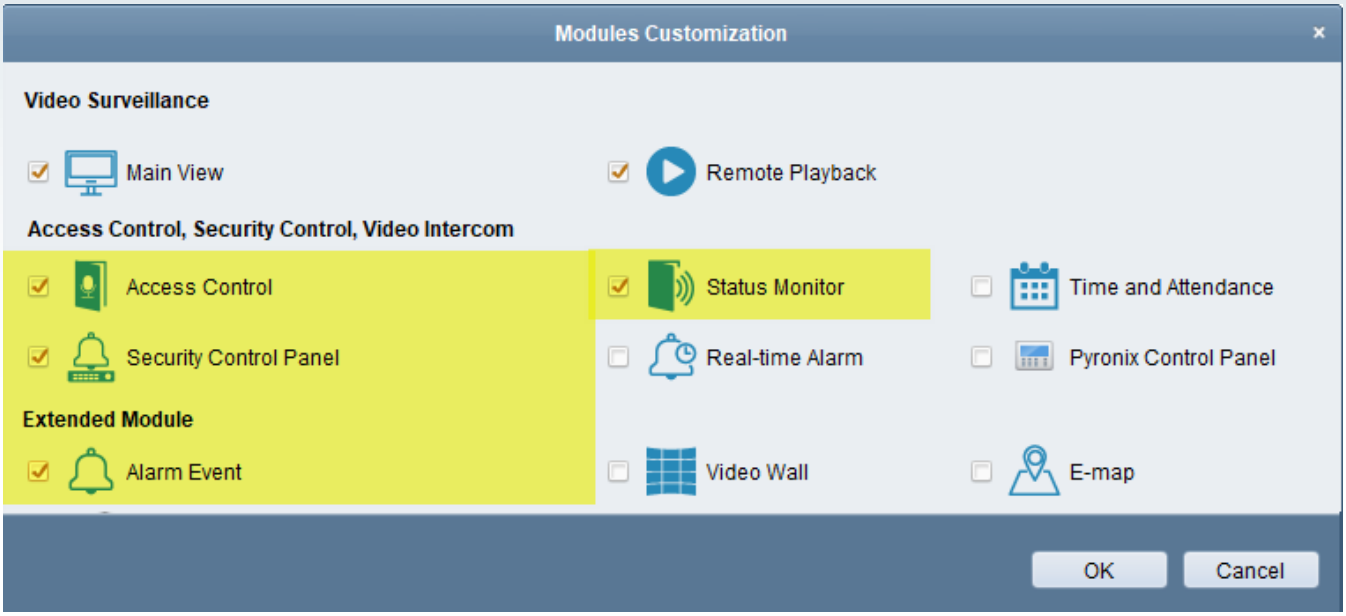
Add Module

Adding Access Control Modules

Control Panel > Modules Customization

Access Control
Status Monitor
Alarm Event

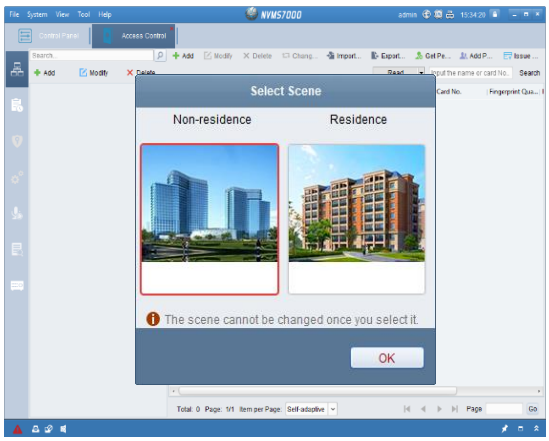




Note: Only the latest version of NVMS7000 (PC) supports Access Control

Scene Selection

Upon opening the access control tab in the newest version of NVMS7000, the software will prompt you the following Scene question:



Non-residence or Residence.

The wizard sets help pre-program based on the scenario.

Note: Once the scene is selected, it cannot be changed, unless NVMS7000 is uninstalled and then re-installed to reset the setting. Also, When you select **Non-Residence** mode, you cannot configure the Attendance Rule when adding a person

Guideline / Directions:

1. Create Working Hour Template
2. Define the Wiegand Reader Working Hour
3. Create Organization Structure and Level
4. Create Personal Account, Card# and working hours
5. Define the Access Permission
6. Final, Test it and use Status Monitor to check the status.

Tutorial Video: https://www.youtube.com/watch?v=v2d5atg3h1I

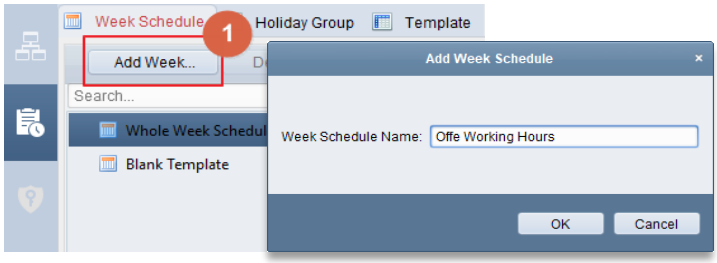
Define Working Hour / Template

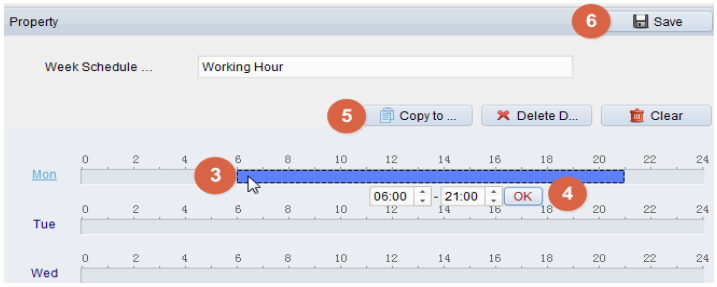
Open **Access Control** > **Schedule & Template**

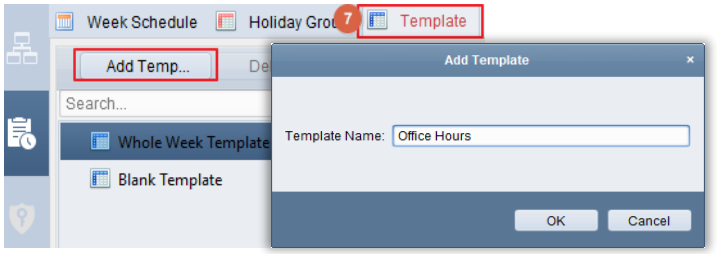
1. Select Week Schedule, Click **Add Week**…
2. Define Schedule Name (Example; Office Working Hours)
3. On the weekly schedule, draw a line to define the time period.
4. Define it more precisely and click **OK.**
5. use **Copy to…** to apply the timeline to other weekdays.
6. click the **Save** button on the top right to keep the changes.

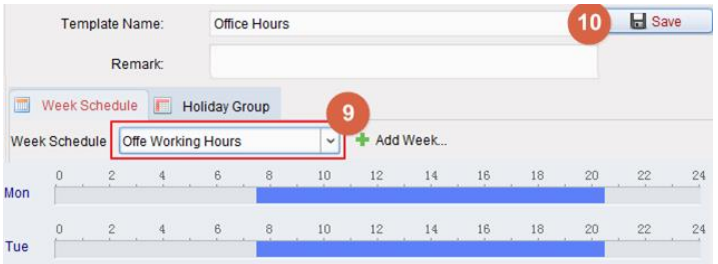
7. **Switch to the Template** > **Add Temp…**
8. Define Template Name (For example; Office Hours)
9. **Select Week Schedule** you created.

10. Click the **Save** button in the upper right corner.





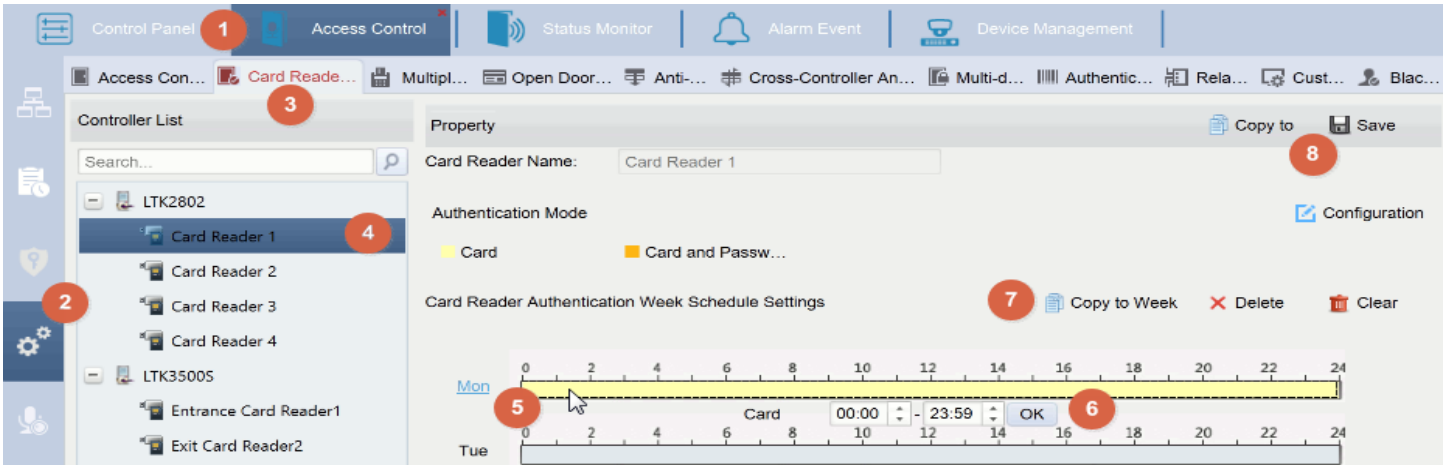




Program Wiegand Reader Schedule

Program Card Reader Authentication (For more detail, read Ch 6.8.2 in User Manual)

1. Go to **Access Control** >
2. **Advanced Function** >
3. **Card Reader Authentication**
4. Select Reader first.
5. Drag and Draw to define the timeline.
6. Click the time bar to enter or edit a more precise timeframe, click **OK**
7. Use Copy to Week. That will copy the current highlight to others. Use Delete to erase, use Clear to reset all.
8. Final, click **Save** to keep the setting. Or, use **Copy to** setting to other Readers.



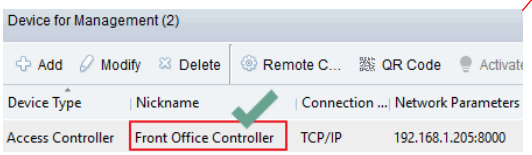
Define Wiegand Reader Parameter

Access Control Parameter

Most times, you don't need to change the Access Control Parameter.

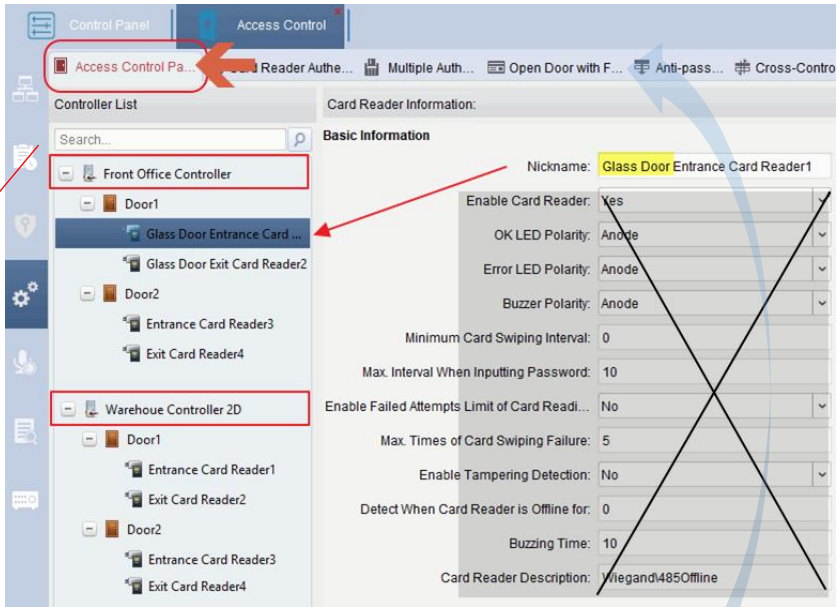
Change Controller's name:

The setting to change the Controller's name is found in the Device Management setting



Change Wiegand Reader's name:

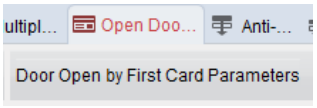
Changing the Wiegand Reader's display name is not necessary, but it is helpful for certain situations to clarify the Wiegand Reader's location.



Open Door with First Card *Purpose:* You can set multiple first cards for one access control point.
After the first card swipes, the controller allows multiple persons to access the door or other authentication actions. The first card mode contains **Remain Open with First Card, Disable Remain Open with First Card, and First Card Authorization**.

Remain Open with First Card, Disable Remain Open with First Card
The door remains open for the configured time duration after the first card swipes until the remain open duration ends.

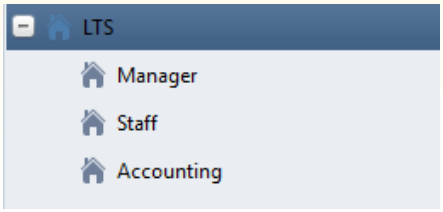
First Card Authorization: All authentications, except for the authentications of super card, duress card, and duress code, are allowed only after the first card authorization.

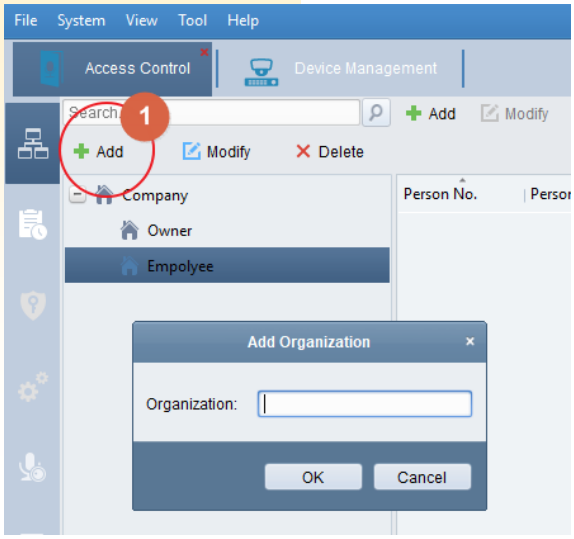


Create Organization & Department

Open **Access Control** > **Person & Card**

1. Click **Add** to create the Organization, click **OK**
2. Click **Add** again and create another department.
   For Example:

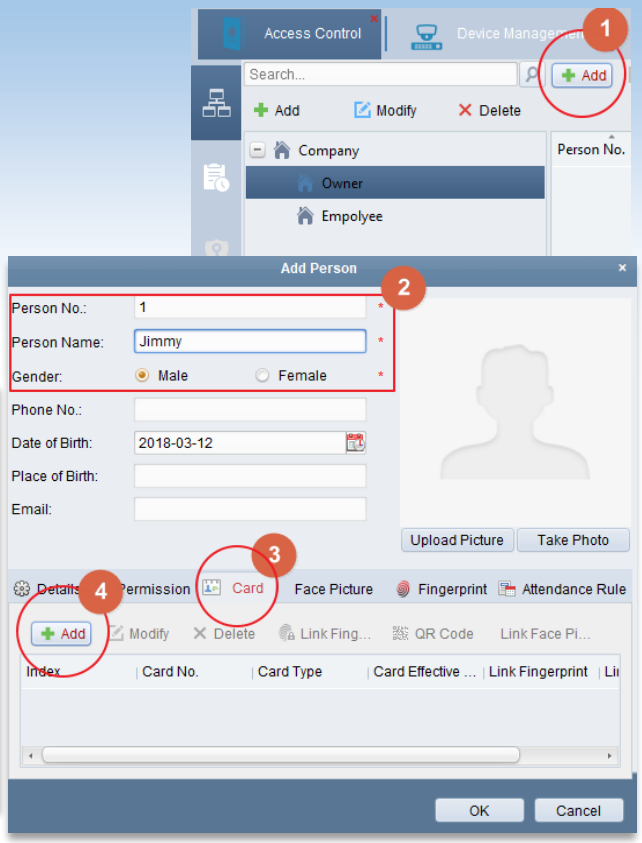


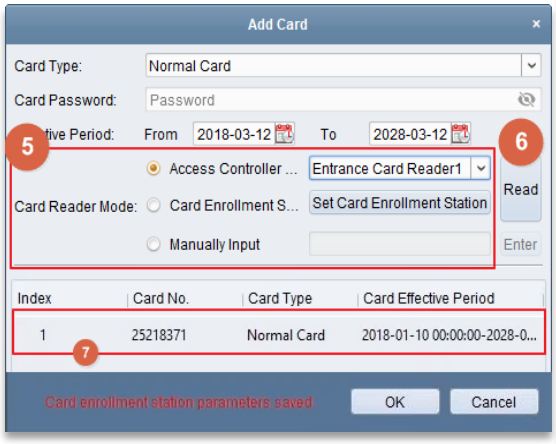


Create User Account:

Open **Access Control** > **Person & Card**

1. Click **Add** to create a personal account.
2. Enter Personal information (* required)
3. Click **Card** for the card registration
4. Click **Add** to add/scan the Card

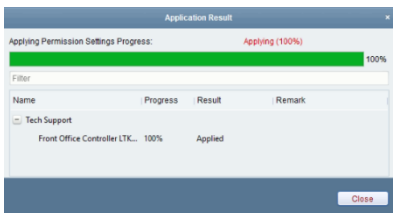




5. Select Access Reader
6. Click **Read**
7. Swipe Card, click OK

8. Final, click **OK** to finish adding Person.

9. If the data is changed, it will automatically prompt for the data Synchronization. Choose Apply Now, or Apply Later to postpone.
   For the batch import/export. Please see the Appendix.



LTKE100ME
Plug and Play USB Mifare

3 ways to scan / issue the card.

1. **Access Controller**
   Use Wiegand Reader to Scan
2. **Card Enrollment (LTKE100ME)**
   Use USB Reader to Scan
3. **Manually input**

Permission

In the Permission module, you can add, edit, and delete access control permissions, as well as applying the permission settings (data synchronization) for the device permissions to take effect.

1. Go to **Access Control** > **Permission**

   Note: Each door can only support up to 4 permissions in the list

2. Click Add

3. Define **Permission Name**
4. Select **Template**

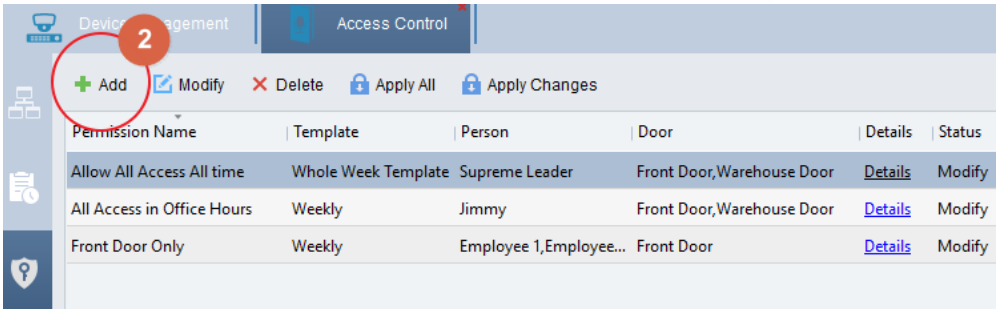
5. Select **User**, click **>** to add

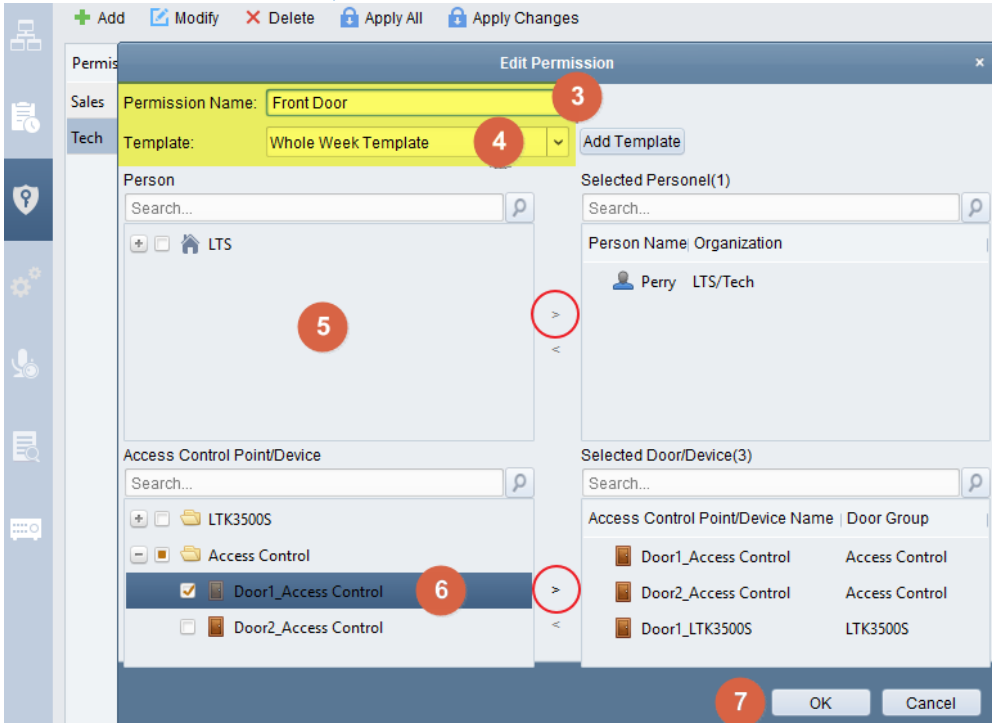
6. Select **Door**, click **>** to add

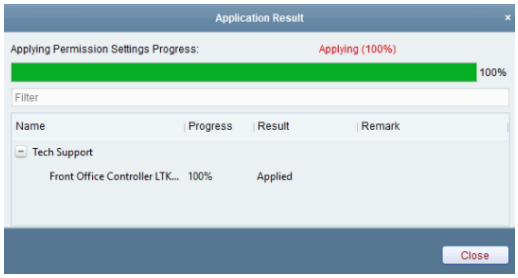
7. Click **OK** to finish.

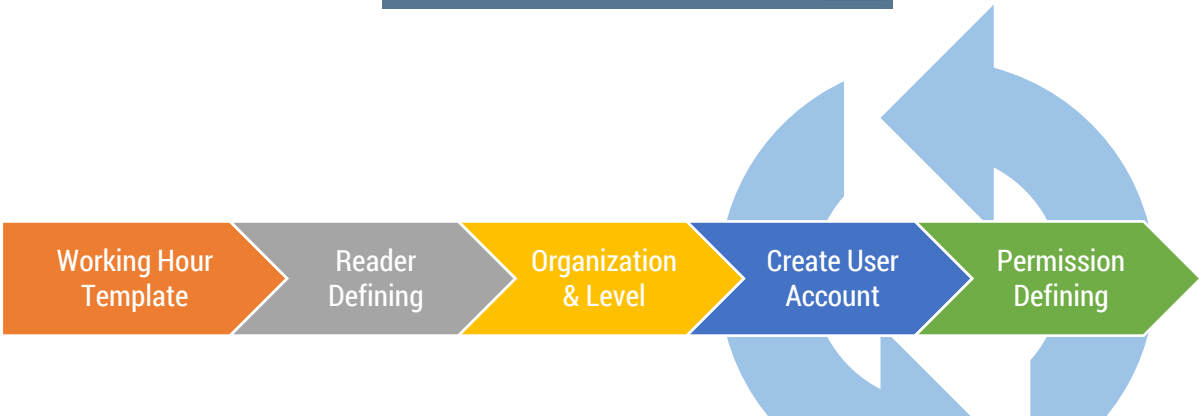
8. If Data is changed, System will automatically prompt for data synchronization. **Apply Now** or, click **Apply Later** wait until final.

   Or, You can find those buttons on the toolbar.



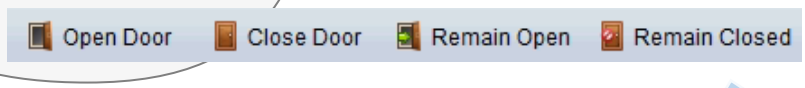


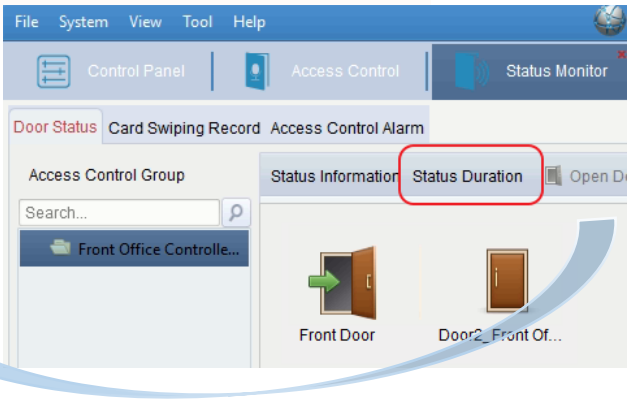




Status Monitor

Purpose: The Status Monitor provides a way to manually control the status (or lock) for all the access control points (doors)," including opening door, closing door, remaining open, and remaining closed.

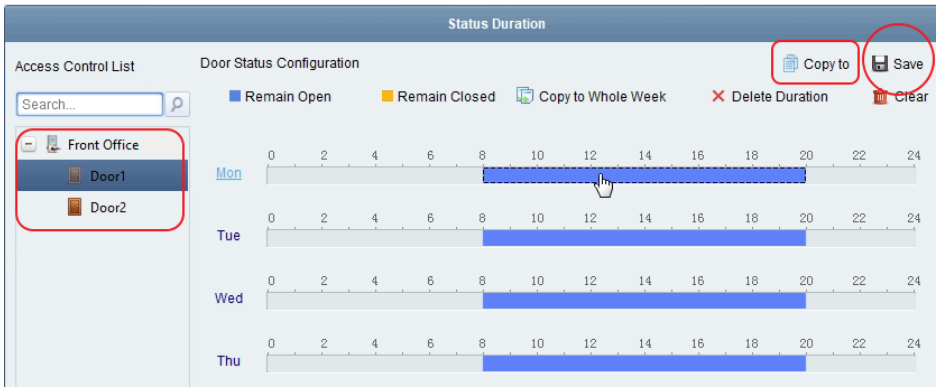




Status Duration:

Purpose:
Status Duration allows you to set an access control point (door) to remain open or remain closed according to a defined schedule.

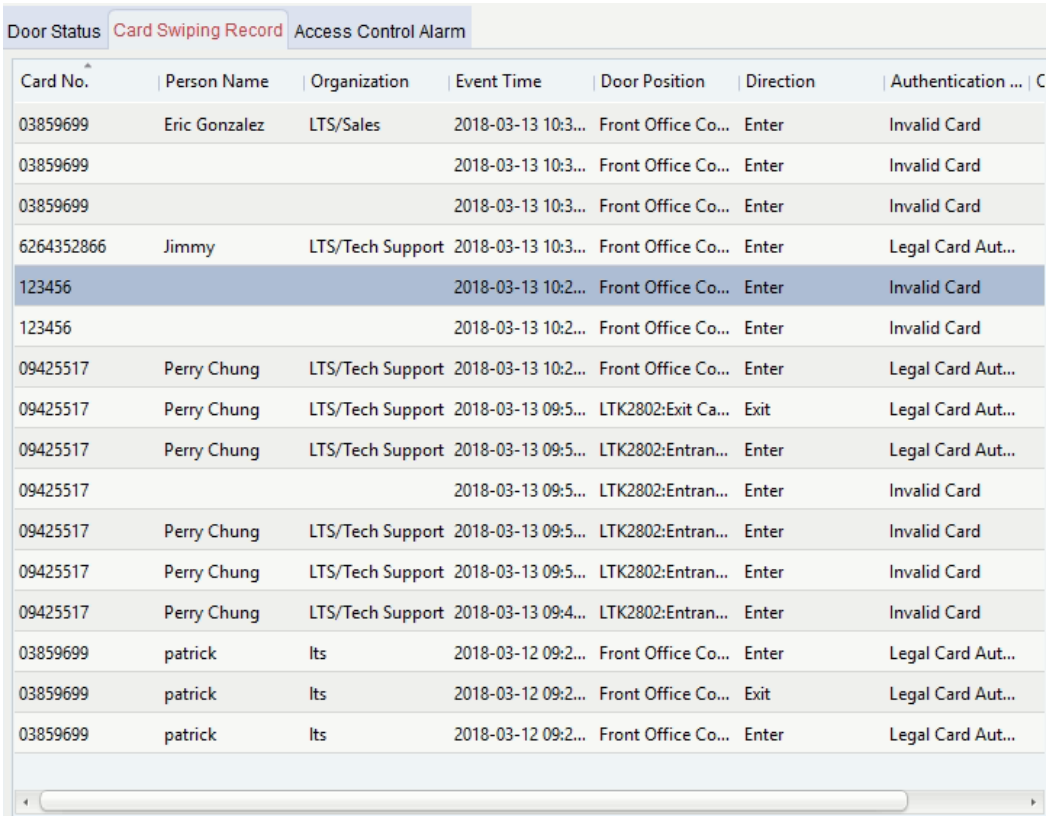
In the Door Status module, click the Status Duration button to enter the Status Duration interface.



Card Swiping Record:

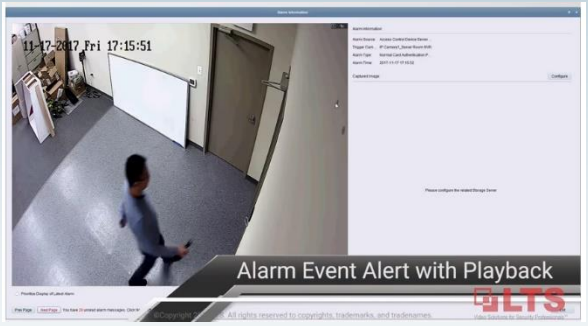
The logs of card swiping records of all access control devices will display in real time. You can view the details of the card swiping event, including card No., person name, organization, event time, etc. You can also click the event to view the cardholder details, including person No., person name, organization, phone, contact address, etc.

Note: please remembered only one local connection can receive the log. 2nd Connect may or may not get the instance.

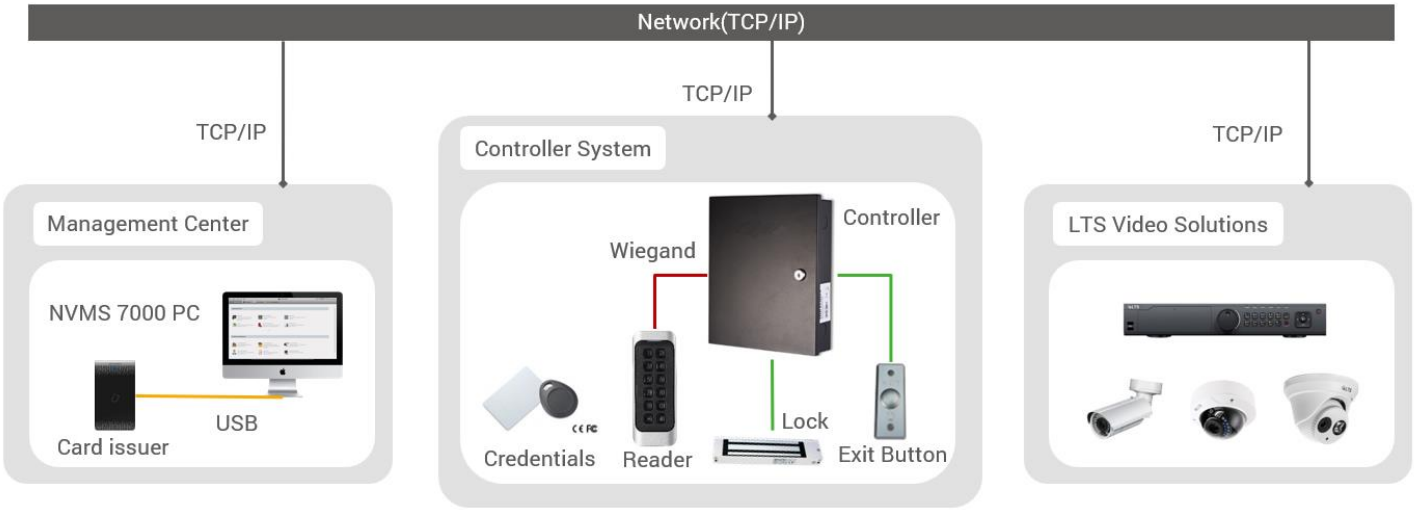


Card No.	Person Name	Organization	Event Time	Door Position	Direction	Authentication ...
03859699	Eric Gonzalez	LTS/Sales	2018-03-13 10:3...	Front Office Co...	Enter	Invalid Card
03859699			2018-03-13 10:3...	Front Office Co...	Enter	Invalid Card
03859699			2018-03-13 10:3...	Front Office Co...	Enter	Invalid Card
6264352866	Jimmy	LTS/Tech Support	2018-03-13 10:3...	Front Office Co...	Enter	Legal Card Aut...
123456			2018-03-13 10:2...	Front Office Co...	Enter	Invalid Card
123456			2018-03-13 10:2...	Front Office Co...	Enter	Invalid Card
09425517	Perry Chung	LTS/Tech Support	2018-03-13 10:2...	Front Office Co...	Enter	Legal Card Aut...
09425517	Perry Chung	LTS/Tech Support	2018-03-13 09:5...	LTK2802:Exit Ca...	Exit	Legal Card Aut...
09425517	Perry Chung	LTS/Tech Support	2018-03-13 09:5...	LTK2802:Entran...	Enter	Legal Card Aut...
09425517			2018-03-13 09:5...	LTK2802:Entran...	Enter	Invalid Card
09425517	Perry Chung	LTS/Tech Support	2018-03-13 09:5...	LTK2802:Entran...	Enter	Invalid Card
09425517	Perry Chung	LTS/Tech Support	2018-03-13 09:5...	LTK2802:Entran...	Enter	Invalid Card
09425517	Perry Chung	LTS/Tech Support	2018-03-13 09:4...	LTK2802:Entran...	Enter	Invalid Card
03859699	patrick	lts	2018-03-12 09:2...	Front Office Co...	Enter	Legal Card Aut...
03859699	patrick	lts	2018-03-12 09:2...	Front Office Co...	Exit	Legal Card Aut...
03859699	patrick	lts	2018-03-12 09:2...	Front Office Co...	Enter	Legal Card Aut...

Video Verification

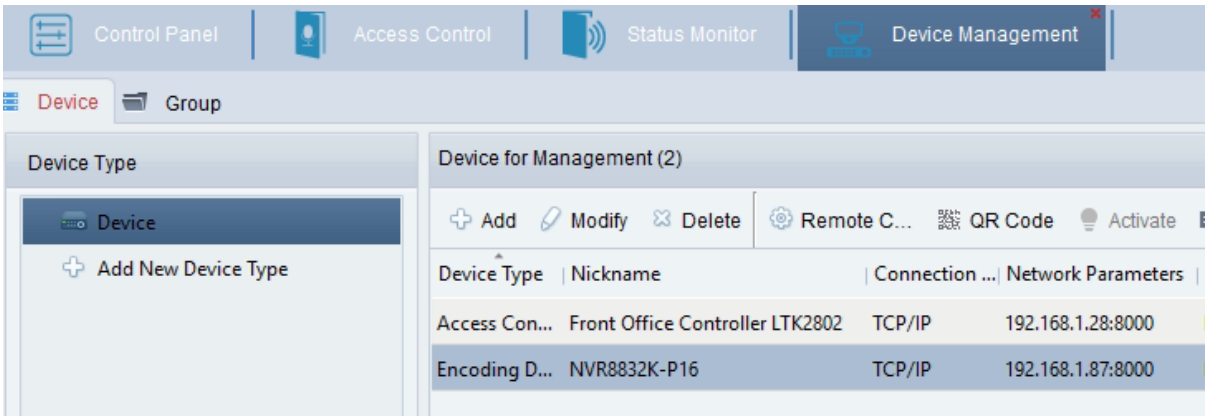


• Enroll Credentials • Manage Controllers • Video Verification



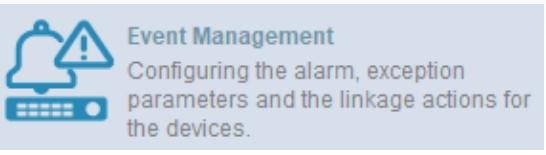
Setup LTS NVR/DVR/IPC in the Device Management first.

Video verification is only possible once you have a video device configured in Device Management.
The video Device requires storage capability to be able to recall and display a video event that is linked to an access control event.



Event Management

Link Video Device to the Access Control



Go to **Maintenance and Mangement** > **Event Management**

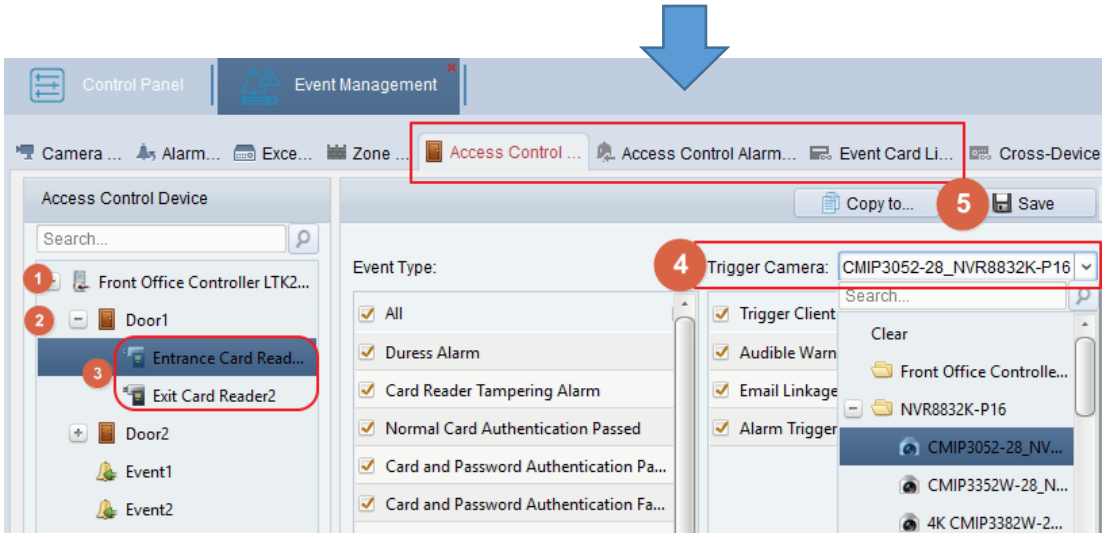
Go to **Access Control Event** Tab

There are 3 tabs that are related to Access Control: **Access Control Event** **Access Control Alarm Input** **Even Card Linkage**

Access Control Event
contains three sets of events:

1. Controller
2. Door
3. Reader
   - Link to 1 Channel Video
   - NVR/DVR
   - IPC
   - Doorbell

4. Click the **Save** button to save the settings

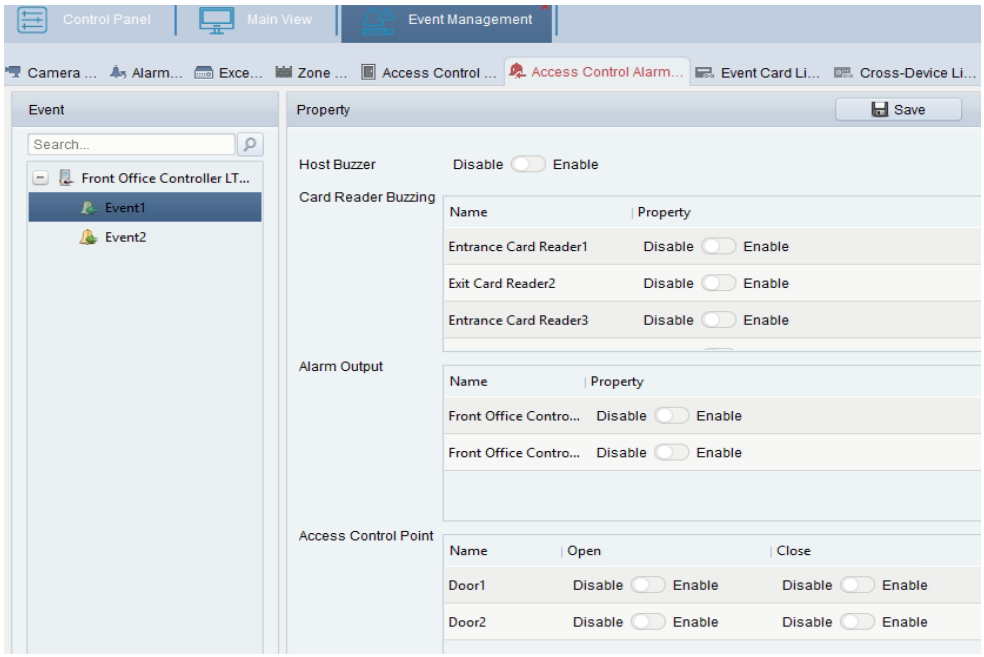


Each Video Device must have Recording Enabled. If there is no recording available on the system, you will only see Live View and would not see linked event playback

Access Control Alarm Input

Purpose: The access control alarm inputs can be linked to several actions (e.g., alarm output, host buzzer) when it is triggered.

Note:
The linkage here refers to actions performed in the client software NVMS7000 triggering an action on the controller.



Host Buzzer: The audible warning of the controller will be triggered.

Card Reader Buzzer: The audible warning of the card reader will be triggered.

Alarm Output: The alarm output will be triggered for notification.

Access Control Point (Open/Close): The door will be open or closed when triggered.
Note: The Door cannot be configured as open and closed at the same time.

Click the **Save** button to save the settings

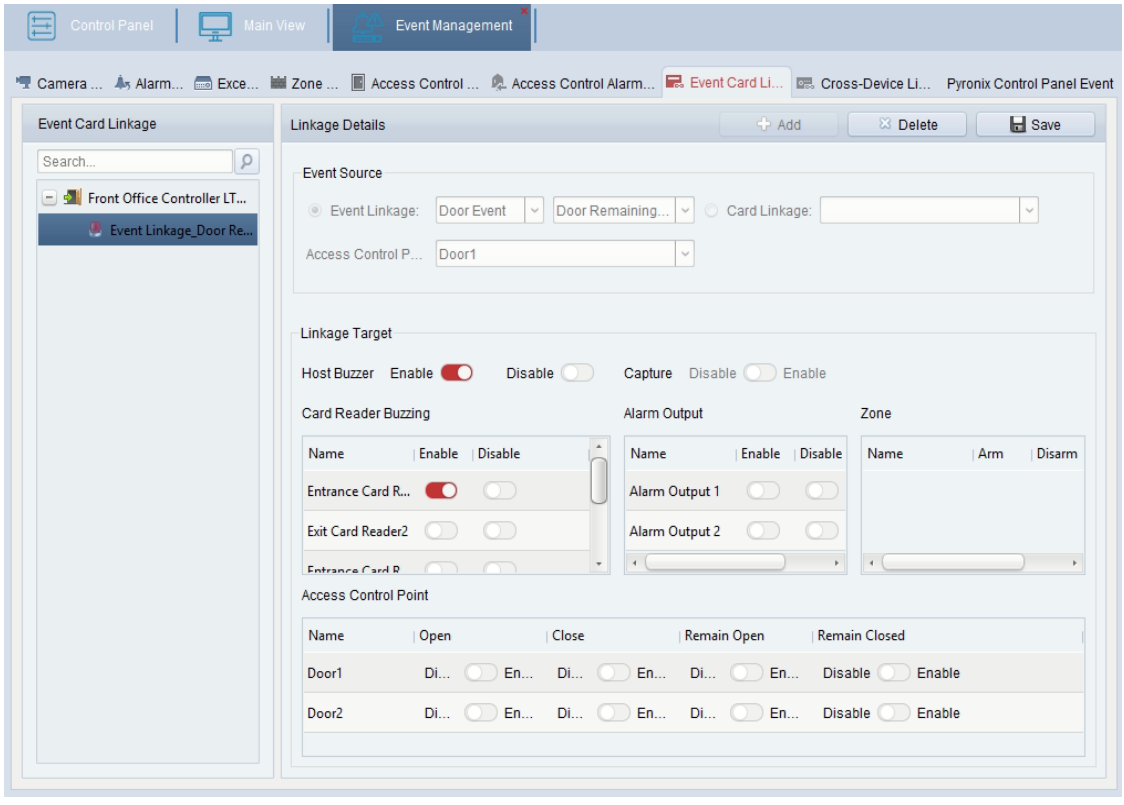
Event Card Linkage

The Event Card Linkage provides a way for the controller to perform an action (e.g., alarm output, host buzzer, etc.) when a specified event occurs.

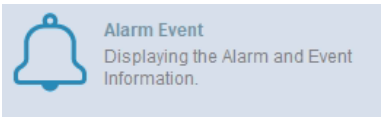
The linkage here refers to an event triggering an action on the Controller.

Click **Add** to enable this feature.

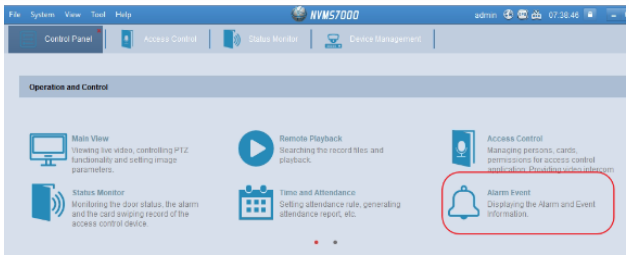
For further explanation and setup for this feature, please refer to Page 86 in the User Manual



Alarm Event / Log Search / Video Live View

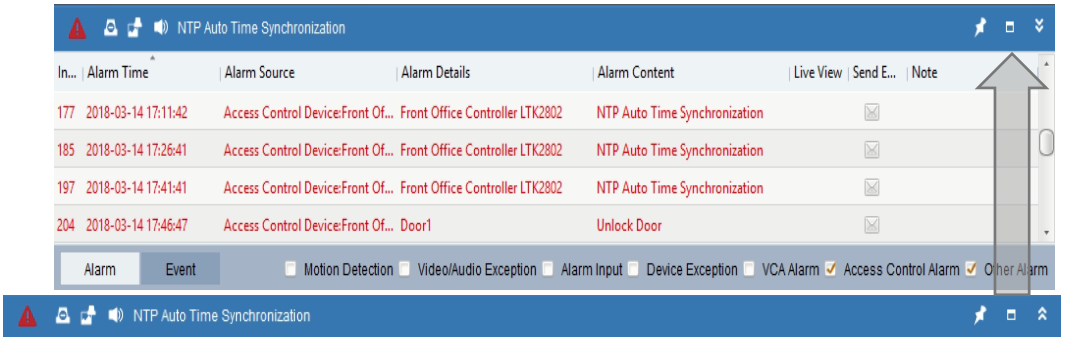


The Alarm Event Module contains the current day's Alarm/Event entries.



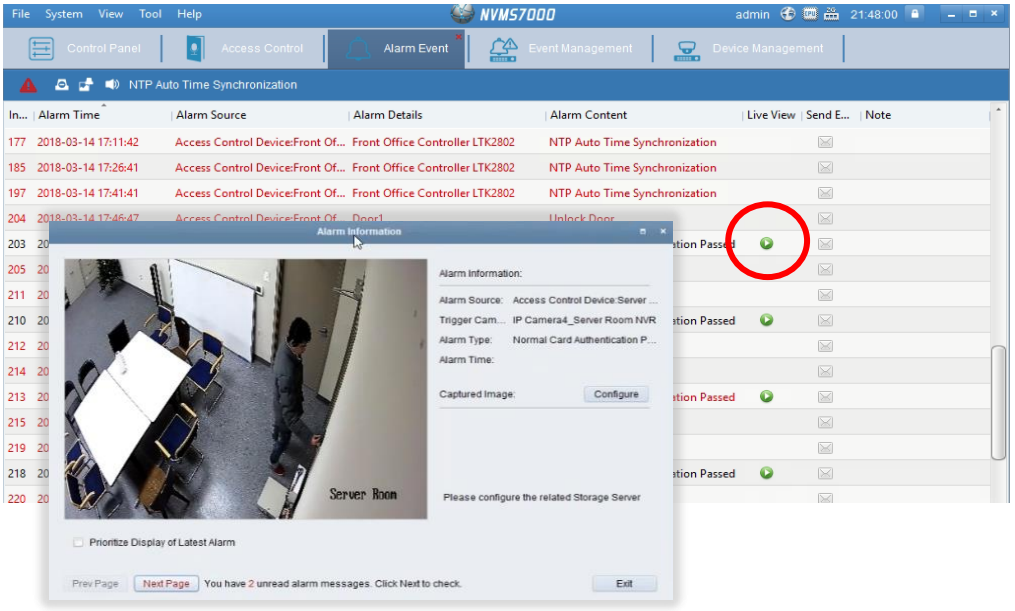
There are two ways to open it.

1. From the bottom panel.
   (Displays only several entries)



2. Or, **Control Panel** > **Alarm Event** to open it. (Open in full window)

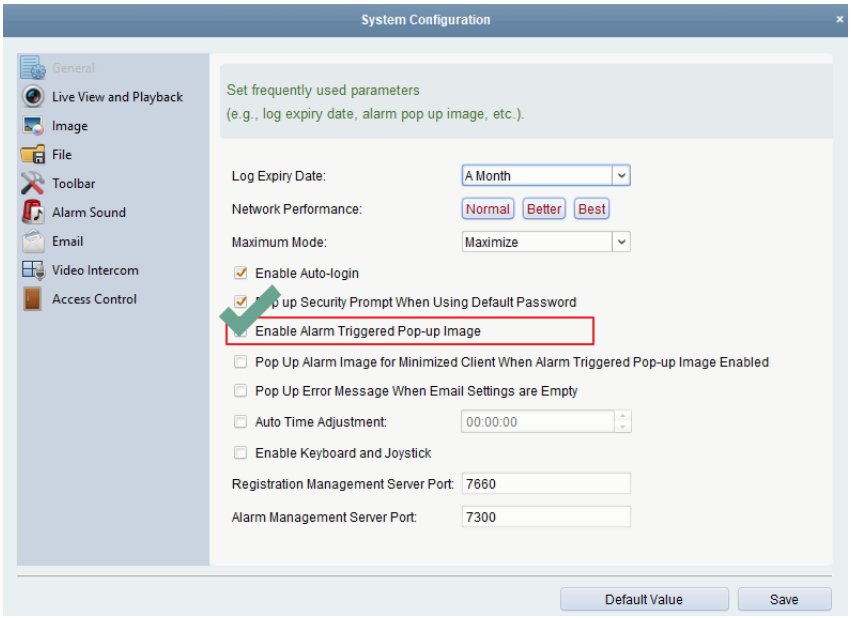
Click the ▶ to bring up the Live view video.



Tip:
If there seems to be an excess in NTP Auto Time Synchronization entries, The NTP Sync time can be adjusted to lower how often the time is synced with the NTP server. We recommend this setting to be set to 1440 to have the controller sync the time once per day (Refer to Page 10 of this document).

Tip:
To set the Alarm Notification window to automatically pop up in the NVMS7000 when a linked event is triggered:

Got to **Control Panel** > **System Configuration** > **General**, checkmark **Enable Alarm Triggered Pop-up Image**

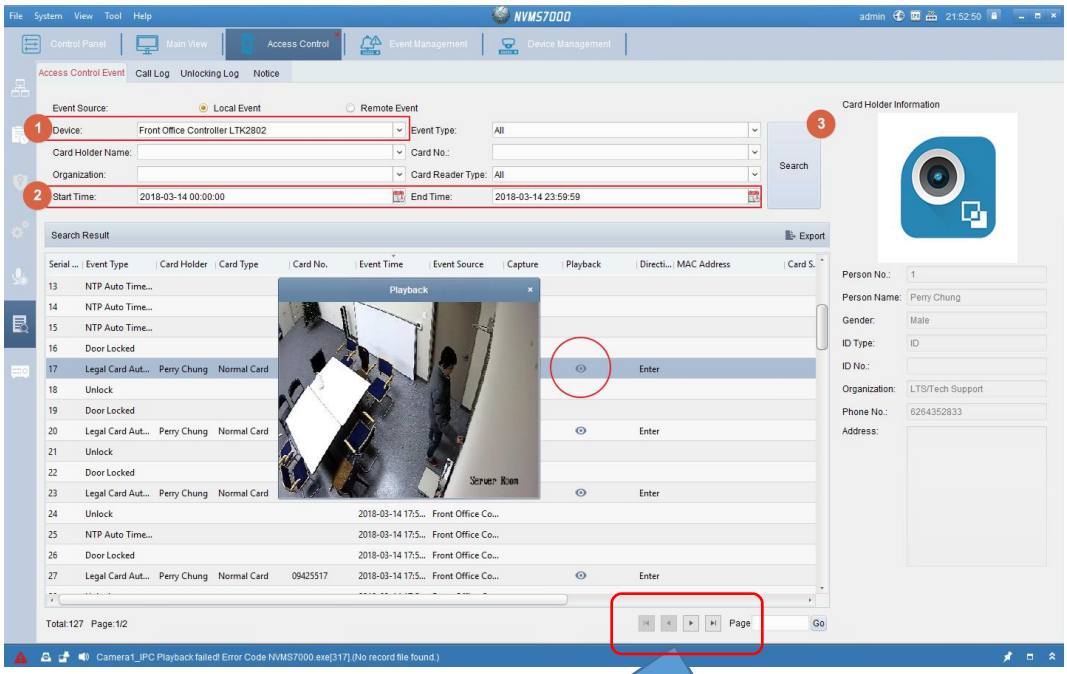


Alarm Event / Log Search / Video Playback

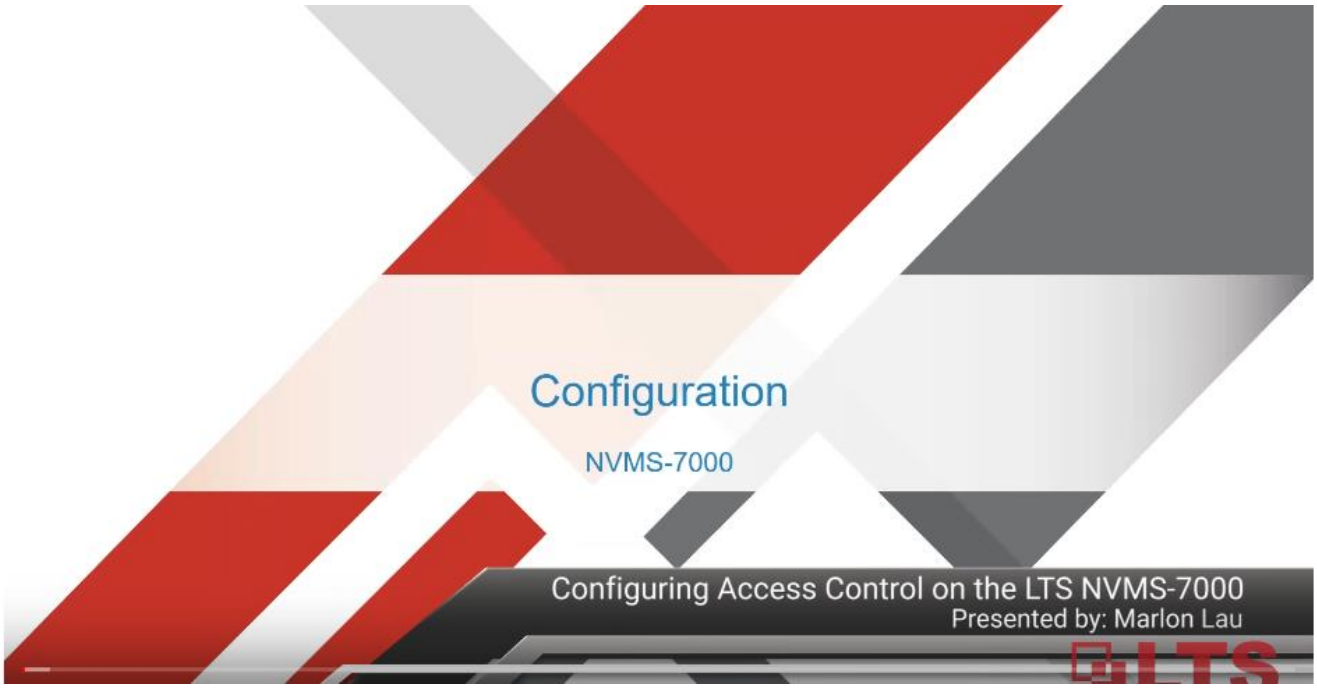
Go to **Access Control** > **Log Search**

1. Select **Device**
2. Set **Start Time** & **End Time**.
3. Click **Search**

4. If you see the Playback icon available, you can click the icon to playback the linked video footage.



Note:
If your NVMS7000 window size is less than 1440x900. The scrollbar on the bottom of the window needs to be moved to the right in order to see the Playback Column.



Appendix A Sound Prompt and Indicator

After the card reader is powered on, LED status indicator will turn blue and blink for 1 time. Then it will turn red and blink for 3 times. At last the buzzer will send out a beep sound indicating the starting up process is completed.

During using the card reader, it will send out different sounds prompt and the LED indicator on it have different statuses. You can refer to tables below for detailed information.

Table 6-1 Description of Prompt Sound

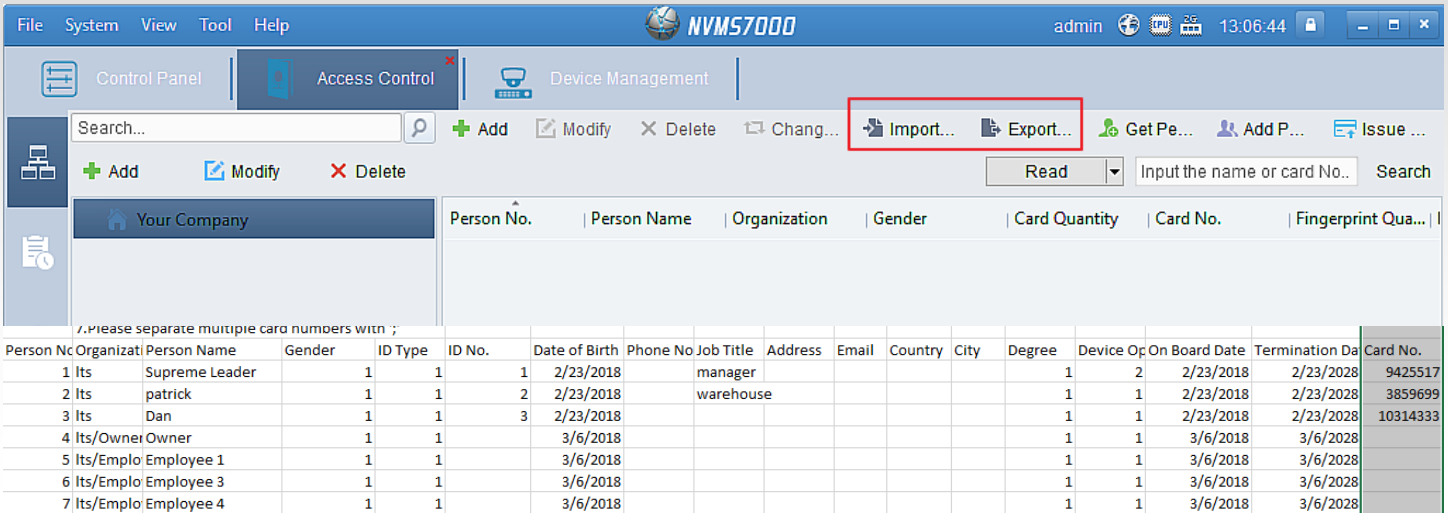
Sound Prompt	Description
One beep	RS-485 protocol: Pressing keys prompt; Swiping card prompt; Time out prompt for pressing keys or swiping card. Wiegand protocol: Pressing keys prompt; Swiping card prompt.
Two rapid beeps	The operation of pressing keys or swiping card is valid.
Three slow beeps	The operation of pressing keys or swiping card is invalid.
Rapidly continuous beeps	Alarm of tamper-proof.
Slowly continuous beeps	The card reader is unencrypted.

Table 6-2 Description of LED Indicator

LED Indicator Status	Description
Green and blinking	Card reader is working normally.
Solid green	The operation of pressing keys or swiping card is valid.
Solid red	The operation of pressing keys or swiping card is invalid.
Red and blinking	For RS-485 protocol: Registering failed or card reader is offline. Failed to get key files of PSAM card; Failed to detect the PSAM card.
Red and Keeping rapidly blinking	Available for reading file mode of CPU card: PSAM is not inserted or undetected.

Appendix B: EXCEL: Access Control Person & Card Bulk Import / Export

You can export/import the Access Control Person database to/from an Excel file. Keep note that Card No must be unique



Person No	Organizati	Person Name	Gender	ID Type	ID No.	Date of Birth	Phone No	Job Title	Address	Email	Country	City	Degree	Device Op	On Board Date	Termination Da	Card No.
1	Its	Supreme Leader	1	1	1	2/23/2018		manager					1	2	2/23/2018	2/23/2028	9425517
2	Its	patrick	1	1	2	2/23/2018		warehouse					1	1	2/23/2018	2/23/2028	3859699
3	Its	Dan	1	1	3	2/23/2018							1	1	2/23/2018	2/23/2028	10314333
4	Its/Owner	Owner	1	1		3/6/2018							1	1	3/6/2018	3/6/2028	
5	Its/Emplo	Employee 1	1	1		3/6/2018							1	1	3/6/2018	3/6/2028	
6	Its/Emplo	Employee 3	1	1		3/6/2018							1	1	3/6/2018	3/6/2028	
7	Its/Emplo	Employee 4	1	1		3/6/2018							1	1	3/6/2018	3/6/2028	