

# LTS VIDEO INTERCOM

Supports up to 500 Apartment Units



**Important Notice:**  
**MUST UPGRADE** the main module **firmware** or **NVMSv3** to the latest version. There are several important patches since released. Please Check: [www.ltsecurityinc.com/downloads](http://www.ltsecurityinc.com/downloads)

## MENU

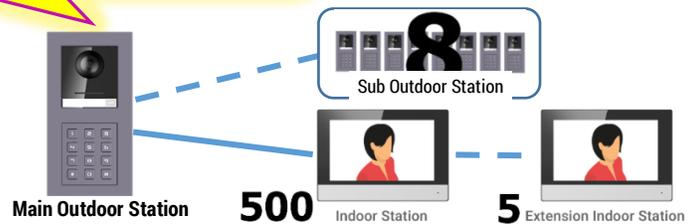
Introduction / Video Link	1, 2
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### Indoor Station: LTH-D301GY-WIFI



- 7" video touch screen Indoor Station
- Built-in Mic and Speaker
- Support Wi-Fi / LAN network connection
- Power require: PoE, DC12V

**Minimal Requirement:**  
Intercom mandatory requires  
**1 Main Module & 1 Indoor Station.**



### LTH-M201-C

#### Outdoor Main Module (or Extend)

This main module comes with 2 MP camera with a Name Tag button. Support built-in Mic and speaker. Support up to other 8 Ext Outdoor Module



### LTH-M201-IM

#### Status Indicator sub module

Status indicator only provide with 3 colors LED status, it is not a button.



### LTH-M201-6B

#### Name Tags & 6 buttons sub module

Which allows the main module to ring up to 6 additional rooms. This module has the backlight feature but it only turns on when the M201-C goes into the night mode.



### LTH-M201-DIS

#### Touch Screen sub module

Popular sub module. It supports address book and more features. Usually, sell as a combo package with the M201-KP together.



### LTH-M201-KP

#### Number Keypad sub module



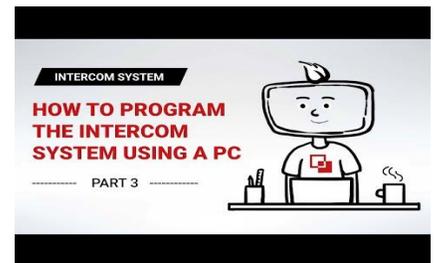
### LTH-M201-MCR

#### Mifare Card Reader sub module

Only support reading 34-bit key. There is no 26-bit function supported.

13.56MHz Card Reader

## Video & Tutorial



# Intercom Introduction

## Outdoor Station (1 Main Outdoor Station Only)

LTS Intercom Outdoor Station consists of 1 mandatory camera module and optional extension modules like keypad module and card reader module. For each main entrance outdoor station, you can add up to 8 side-entrance outdoor stations. (Side Sub-Outdoor-Station up to 8)

## Indoor Station (for Linking to the Outdoor Station)

On the 7" screen, you can view and talk with visitors in real time, review missed call history, etc.... Each apartment / house should have one mandatory main indoor station. (each Indoor Station you can have up to 5 Extend Indoor Station available)



## In-Depth Details and Programming

A large-scale installation may seem daunting when there may be dozens or even hundreds of devices all talking between each other. However, the actual depth of networking is quite shallow. The "Main Outdoor Station" is our center node and all other devices in an intercom network will all eventually point back up to it.

Each device network IP must be kept in the same network region.

You must use the NVMSv3 software to connect each device in the device management first.



IP Intercom System			2 Wire Intercom System		
<b>LTH-M001</b>	<b>LTH-M201-C</b>	<b>LTH-D301GY-WIFI</b>	<b>LTH-M201-C-2</b>	<b>LTH-D301GY-WIFI-2</b>	<b>LTH-MD06-2</b>
					
<ul style="list-style-type: none"> <li>Vandal Resistant IP Door Station</li> <li>1280 x 720P@30fps</li> <li>IR up to 15ft</li> <li>Built-in Mic and Speaker</li> <li>DC12V, PoE</li> <li>IK9 &amp; IP66</li> <li>LTS NVR Compatible</li> </ul>	<ul style="list-style-type: none"> <li>IP Intercom Camera Module</li> <li>1920 x 1080P</li> <li>IR up to 15ft</li> <li>180° Wide Angle of View</li> <li>PoE</li> <li>LTS NVR Compatible</li> </ul>	<ul style="list-style-type: none"> <li>IP Video Indoor Station</li> <li>7" Video Indoor Capacitive Touch Screen</li> <li>Built-in Mic and Speaker</li> <li>Support 32G SD Card</li> <li>10/100 Ethernet</li> <li>DC 12V, PoE</li> <li>Wi-Fi</li> <li>Grey Color</li> </ul>	<ul style="list-style-type: none"> <li>2 Wire Intercom Camera Module</li> <li>1920 x 1080P</li> <li>IR up to 15ft</li> <li>180° Wide Angle of View</li> <li>DC 24V</li> <li>LTS NVR Compatible</li> </ul>	<ul style="list-style-type: none"> <li>2 Wire Video Indoor Station</li> <li>7" Video Indoor Capacitive Touch Screen</li> <li>Built-in Mic and Speaker</li> <li>Support 32G SD Card</li> <li>DC 24V</li> <li>Wi-Fi</li> <li>Grey Color</li> </ul>	<ul style="list-style-type: none"> <li>2 Wire 6 Channel Video/Audio Distributor</li> <li>10/100 Ethernet</li> <li>24V DC Power Adaptor Included</li> </ul>
					
Intercom Module					
<b>LTH-M201-6B</b>	<b>LTH-M201-KP</b>	<b>LTH-M201-DIS</b>	<b>LTH-M201-MCR</b>	<b>LTH-M201-IM</b>	<b>LTH-M201-BK</b>
					
<ul style="list-style-type: none"> <li>IP Intercom 6 Buttons Module</li> </ul>	<ul style="list-style-type: none"> <li>IP Intercom Keypad Module</li> </ul>	<ul style="list-style-type: none"> <li>IP Intercom Display Module</li> </ul>	<ul style="list-style-type: none"> <li>IP Intercom Mifare Card Reader Module</li> </ul>	<ul style="list-style-type: none"> <li>IP Intercom Indicator Module</li> </ul>	<ul style="list-style-type: none"> <li>IP Intercom Blank Module</li> </ul>
					

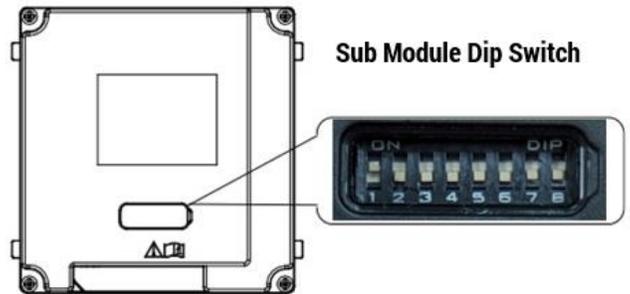
### What is difference in between 2-Wire Intercom model and IP Intercom model?

The 2-wire Intercom model is a standalone intercom system. It is running 2 wires to communication with each device. You need at least 3 things to make a Set. Power (LTH-MD06-2), Main Module (LTH-M201-C-2), Indoor Station (LTH-D301GY-WIFI-2). The Power Module support 1 Main Module with 5 Indoor Station Module. The cable distance up to 300ft max. It is totally different than the standard version. Usually, 2-wire Intercom is based on the special order.

# Dipswitch & Wire Diagram

**All Sub Module(s) back panel hides with the Dip Switch.** For the first time, it requires to be adjusted when you connect with the RS485 wire connection. Remove the rubber cover on the sub-module rear panel to expose the DIP switch. Set the sub-module address according to the DIP rules and install the rubber cover back. If you change any dipswitch, must power cycle to take effect.

Dipswitch	1	2	3	4	5	6	7	8
Sub 1	<b>ON</b>	OFF	OFF	OFF	Reserve	Reserve	Reserve	Ω
Sub 2	OFF	<b>ON</b>	OFF	OFF	Reserve	Reserve	Reserve	Ω
Sub 3	<b>ON</b>	<b>ON</b>	OFF	OFF	Reserve	Reserve	Reserve	Ω
Sub 4	OFF	OFF	<b>ON</b>	OFF	Reserve	Reserve	Reserve	Ω
Sub 5	<b>ON</b>	OFF	<b>ON</b>	OFF	Reserve	Reserve	Reserve	Ω
Sub 6	OFF	<b>ON</b>	<b>ON</b>	OFF	Reserve	Reserve	Reserve	Ω
Sub 7	<b>ON</b>	<b>ON</b>	<b>ON</b>	OFF	Reserve	Reserve	Reserve	Ω
Sub 8	OFF	OFF	OFF	<b>ON</b>	Reserve	Reserve	Reserve	Ω

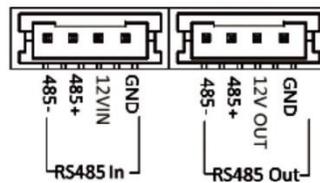


(Dipswitch 1,2,3,4 uses to coding the sub-module address; Dipswitch 5,6,7,8 is reserved (All OFF as default); Dipswitch 8 is for the resistance(120Ω). Valid sub module address range is 1 to 8, each sub-module address cannot be the same, otherwise, it will cause an error.)

## Wire Connection: Main Module to Sub Module

The RS485 wire connection from **M201-C Main Module RS485 output** to the 1<sup>st</sup> Sub module **RS485 input**.

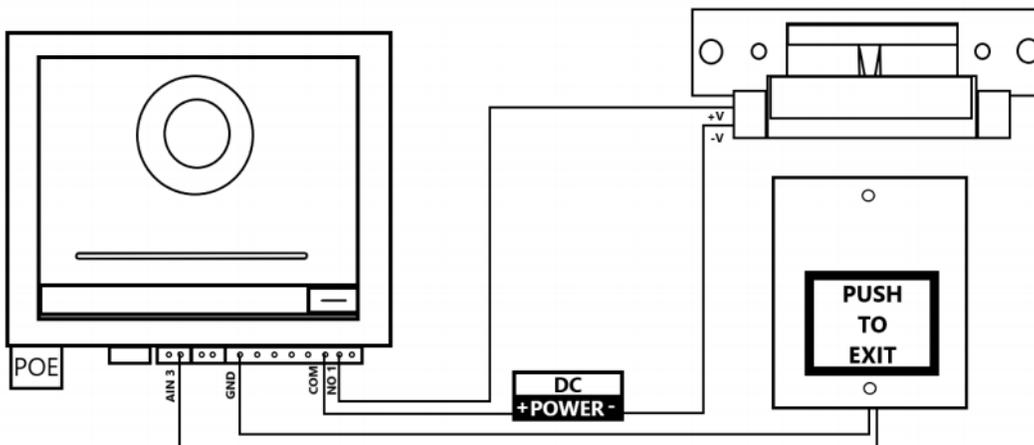
For more sub-modules, connect from the previous sub module RS485 output to the next Sub-Module RS485 input and so on. (You can find the RS485 cable from the **mount frame box**)



**PoE Power Note:** The M201-C can be powered up with standard 802.3af (15.4 watt) PoE input. But if you have touch screen module, it requires 802.3at PoE+ (30 watt) up to 4 sub modules. Otherwise, 30watts can support up to 8 sub modules without the touch screen module. **Recommend use 30W PoE power**

## Outdoor Main Module M201-C wire diagram:

**Note:** There are 2 door strike connections available in the main module. However, you need to program the 2nd door strike with the Indoor Station LTH-D301GY-WIFI to push release it. Meanwhile, the Mobile app LTS Connect only support to release the Door1 only. Please be aware of this. Also, each Main module only supports up to 3 unlock passwords if use the M201-KP keypad to open.



# Unlock Door with Password

**Unlock Door from the Outdoor Keypad:** Unlocking the door using the permission password (Outdoor Station support up to 3 passwords)



Dial-in # **permission password #** for unlocking with public code.  
E.G dial-in #123123# for password= 123123

Each Indoor station room number can support with 1 extra password. If you want to use this feature,  
Dial-in # **Room(number) Password(number) #** for unlocking with room password.  
E.G dial-in #101**123123**# with room 101 and password **123123**

## Calling



### Outdoor to Indoor:

**Use the Outdoor Station's Name Tag button to call the Room number.**

Push the nametag button on the outdoor station, it should start to ringing. The ring tone should sound like a busy tone. If you have the sub-module LTH-M201-IM indicator module, it can display the call has been picking up by the person when the ringing stops. If you got the message "calling fail", that means to connect is not success or the room programming is not finish yet.



**Use Outdoor Station's Keypad to call the Room number.**

Dial-in the room number and ending with the pound button.  
E.G dial 101# =call Room 101



**Use Outdoor Station's Name Tag button to call Mobile App.**

The mobile app is using LTS Connect. You need to create an account and adding the QR code. The QR code only exists in the 1<sup>st</sup> Indoor Station configuration panel.

If you program it correctly, it will call the indoor station and mobile app at the same time when visitors press the name tag button.



### Indoor Station to Indoor Station:

**Calling from Indoor Station to Sub Indoor Station:**

If you are dialing to another Indoor Station, dial "0 – Extension",  
E.G dial 0-1 to call extension-1 sub indoor station Dial 0-0 to call the previous Indoor station connected.  
(0 indicates for the main unit and the appropriate extension for each sub/slave indoor#)

**Calling from Indoor Station to another location's Indoor station**

(Calling separate Indoor Station; located in the Extended Outdoor Station)

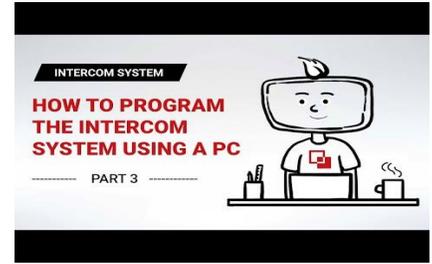
If you are dialing a separate room, dial in Community – Building – Unit – Room Number followed by the call button.  
E.G dial 1-1-1-101 + Dial.

# Activation & Setup

For the first time, you need to activate the Indoor Station & Outdoor Station. There are two ways to activate the station. (See video link in Page 1)

1. Activate it through the Indoor Station Setup Wizard.
2. Use Windows PC to activate it. (Require NVMSv3 software)

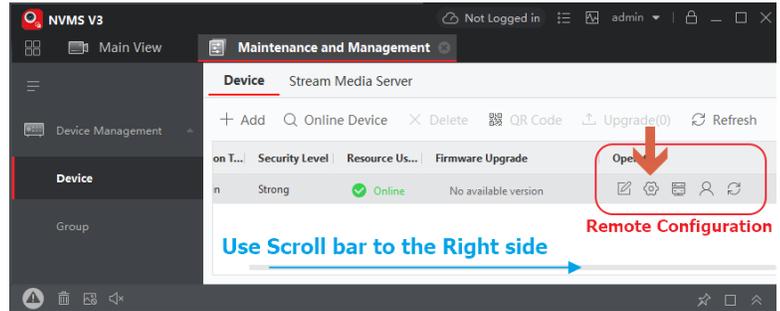
However, the difference is the first method is for the simple intercom environment. If you have more than 3 stations, I recommend using a PC to do the setup will be easy.



## NVMSv3 (NVMS 7000 v3)

You can use the Online Device button on top to perform the device activation and modify the network IP address to match your network region.

After the intercom device is **Online**. You need to use the **Remote Configuration** button to perform the adjustment.



**Define the No#** (for Outdoor Station) and **Room No#** (for Indoor Station). **Important:** Each ID must be unique. Otherwise, you will get a "Calling Fail" error.

**If you only have 1 outdoor station, just focus on the orange box section.**

The Main Outdoor station number is always set to "0". Remember: this is the only Zero in the system.

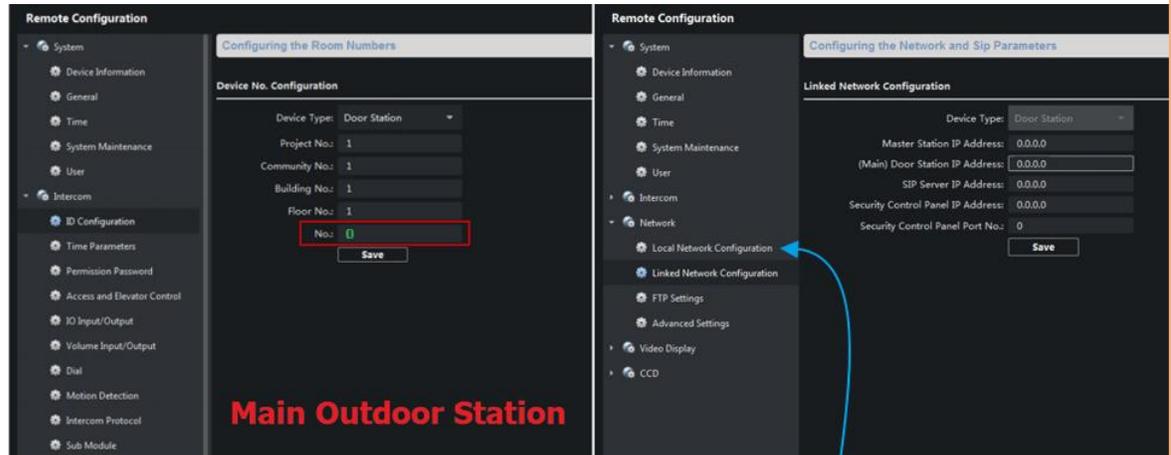
If you have a more outdoor station, then keep reading under. Otherwise, please skip to the next page. (Define Name Tag button)

### For Multiple Outdoor Station:

**Set ID:** Set each sub outdoor station ID. In an example, the **Main outdoor station is always marked as "0"**, Extend Sub Outdoor Station is marked as "1,2,3,4... up to 8"

Go to the **Remote Configuration > Network > ID Configuration**. (Picture on right)

After change Device No, it will ask you to reboot the device.

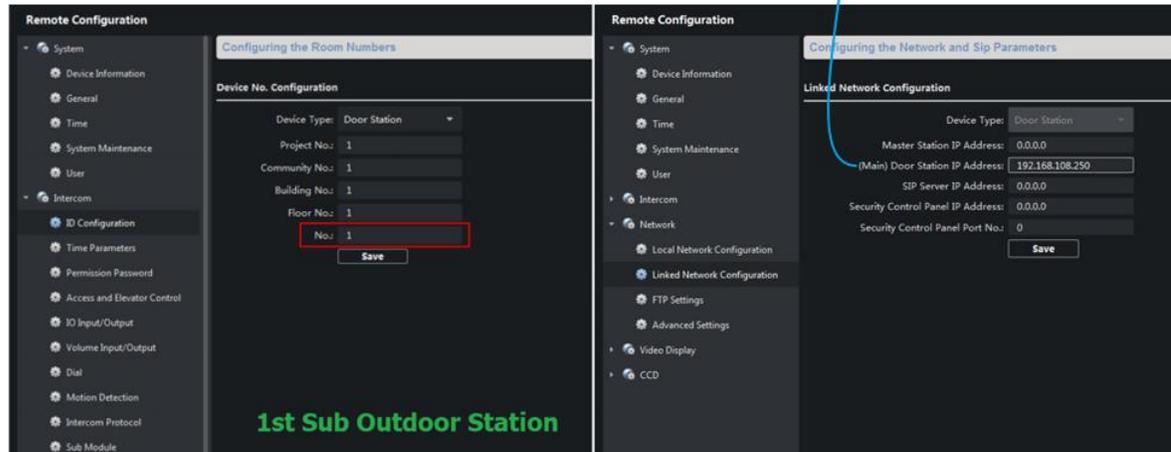


### Link IP to the Master:

If this device is the sub-station, you need to point each device IP to the Master Station IP address.

Go to the **Remote Configuration > Network > Linked Network Configuration**. (Picture on right)

For all other outdoor Stations **Linked Network Configuration**, you need a [point to the Master Outdoor station IP address](#).



# NameTag

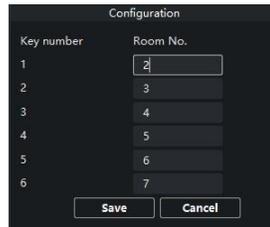
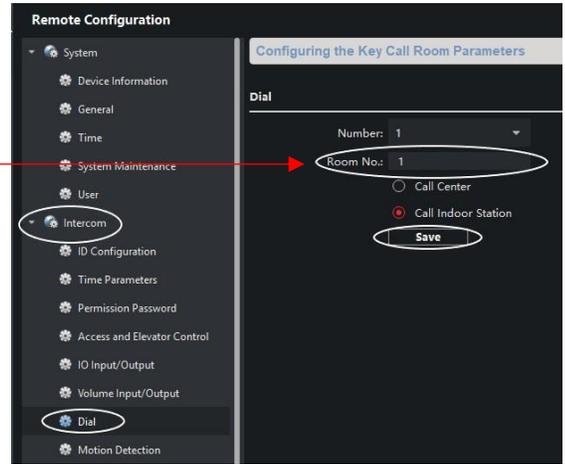
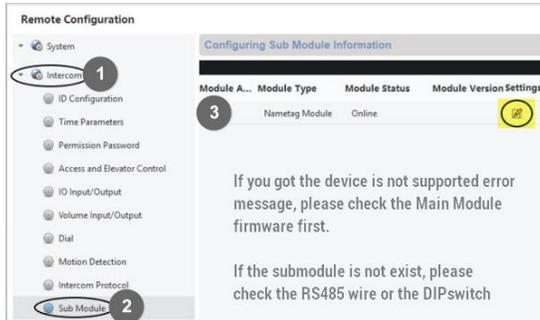
## Define NameTag & Call to Indoor Station

In the Remote Configuration, you can define the M201-C Main Module NameTag button where it calling to.

The room number is the Indoor Station Room No.

## About the 6 NameTag module define:

You can find it from **Intercom > Sub Module**



# Unlock Door with Password Setup

## Keypad Module Programming

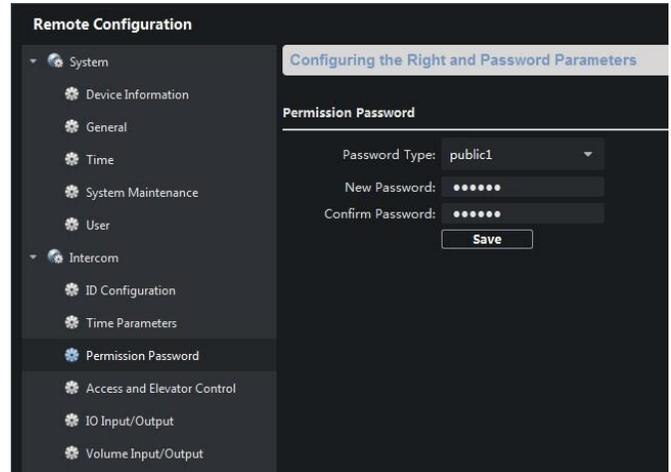
This programming is only required if the customer wishes to unlock the door using either a universal password or a password specific to each room.

Universal passwords can support up to 3 profiles, also can be changed by going into remote configuration for the M201-C and navigating to **Intercom** ->

## Permission Password.



**6-digit codes** can be assigned to unlock the door for public1, public2, public3.



Each indoor station which directly connected to the Master Outdoor station that can support with 1 extra unlock password. You need to use Indoor Station Room number with the password to unlock the door. To program this, you need go to the Indoor Station D301GY Remote Configuration in the NVMSv3.

## Intercom -> Permission Password.

Choose "Unlocking Password" in the Password Type.

The Old Password is initially set to 123456 and you can create a new room unlock password as you see fit.

See how to unlock the door with the password in Page 4.



# Mifare Card Reader

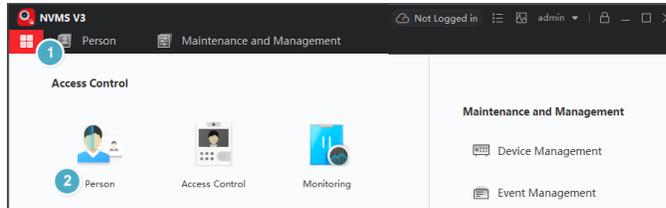
If you have the Mifare Card Reader LTH-M201-MCR, each camera module can add up to 10,000 13.56MHz Mifare Cards or key fob. The card reader is pre-program with 34bit. So, it only can read the 10 digits code from the cards or the key fobs.

To program it is the same as the Access Control programming in the NVMSv3 software.

You need to program the **Person & Access Group** at least.

## Program Person & Card:

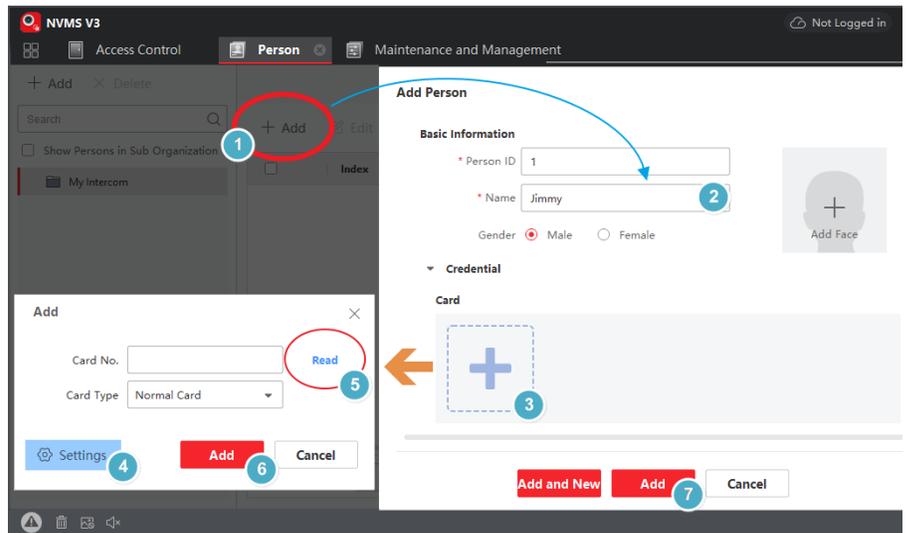
1. Click the Main Menu icon
2. Open Person icon.



## Adding Person & Card:

Follow these steps in the picture.

For the first time the (4) window pop-up, you need to define the card reader reading from. By default, it read to the PC USB LTK100ME card reader.



If you want to read it from the Intercom M201-C, you need to select the Remote > Camera Module. Then, Press read button (5)

If you want to input the card number manually, you just input it in the field with 10 digits. Then, (6) (7)

## Program Access Group

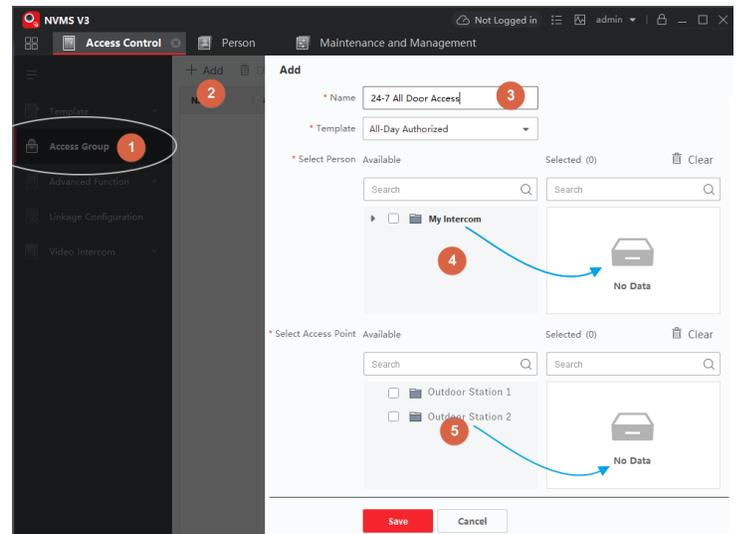
(Access Group aka Permission)

Go to  **Access Control**

Follow these steps in the picture.

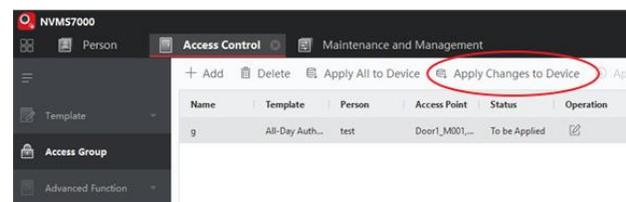
When you define the name (3), please use an easily understand title. That should help you to remember the original purpose.

- (4) drag the person into the list.
- (5) drag the door into the list; open when these cards scanned.



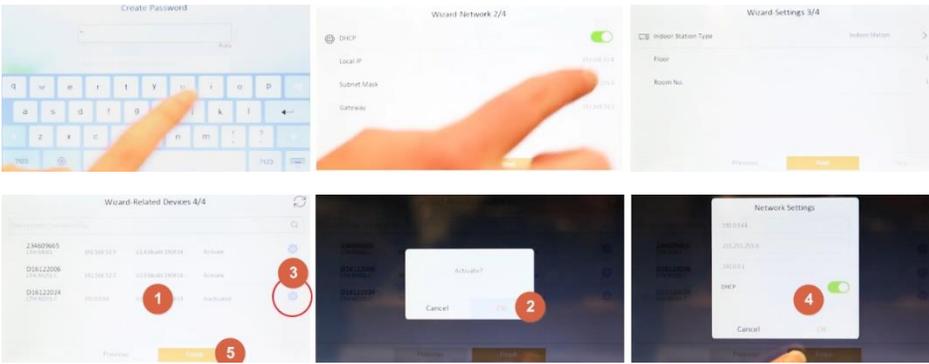
## Apply Changes to Device to the Intercom

When finished, make sure to check the Apply Status to confirm success.



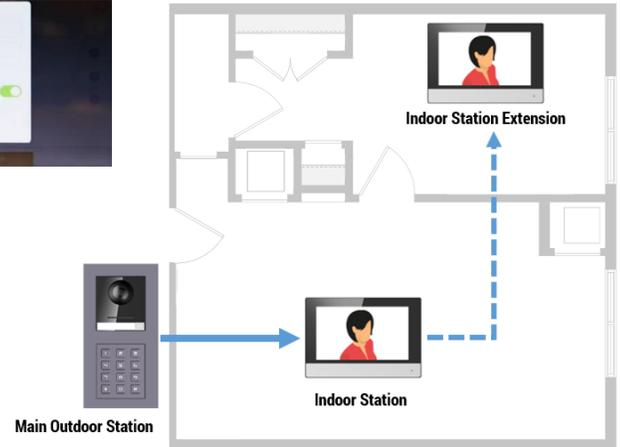
# Indoor Station Setup

The Indoor station activation wizard is straight forward. Please follow the video to setup.



## What is the difference between Indoor and Indoor Extension?

The indoor station extension is extended from the indoor station in the same house. You can connect up to 5 extensions to the same indoor station each. When someone calls the room number from the outdoor station, the indoor station "and" the indoor station extension both Rings at the same time.



## Program Indoor station and Indoor Station Relationships

You need to use NVMSv3 to program this. In an example, I set up the Indoor Station to Room 2

I recommend clarify the device & group name with the easy understand name when you add it to the device management.

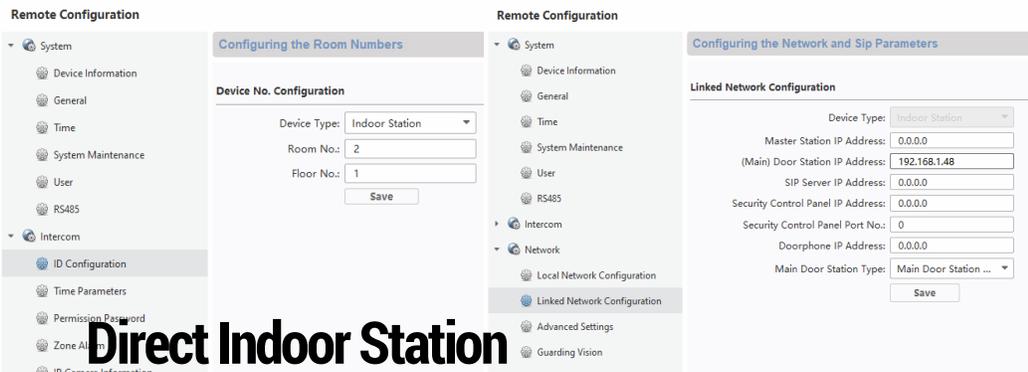
Device Stream Media Server							
	Name	Connection T...	Network Param...	Device Type	Serial No.	Security Level	Resource Us...
<input type="checkbox"/>	5TH Stair	IP/Domain	192.168.1.48	Door Station	LTH-M201-C0120190506RRD...	Strong	Online
<input type="checkbox"/>	Indoor Station 2		192.168.1.44	Indoor Station	LTH-D301GY-WIFI012019051...	Strong	Online
<input type="checkbox"/>	Indoor Station Ext 2-1		192.168.1.45	Indoor Station	LTH-D301GY-WIFI012019051...	Strong	Online

## Network > Linked Network Configuration

(Main) Door Station IP address. Make sure to point the linked address back to the outdoor master station.

## Intercom > ID Configuration Indoor Station

Room No: 2



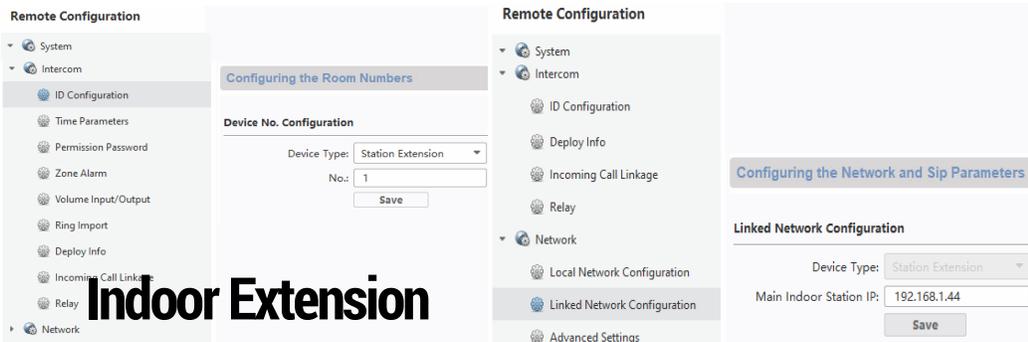
**Direct Indoor Station**

And, I have an indoor station extension.

## Intercom > ID Configuration Station Extension No: 1

## Network > Linked Network Configuration

(Main) Indoor Station IP: point to the prior "Indoor" station IP address.



**Indoor Extension**

# FAQ

**Q: Can the NameTag Dial to the Call Center (NVMSv3) instead of the Indoor Station?**  
**A: Yes, you can.** However, you need to do some adjustments first. You only can use the M-201c to call the Call Center. The submodule is not able to connect the call center. The call center is pre-defined as Room No. 1. In another word, if you decide to call the call center, then you need to change to the indoor station Room No. to another number. Make sure there is no duplicate room number in the system.

**Q: Does the intercom system support SIP?**  
**A: Yes, you can swap the door station to SIP Protocol rather than private and input the SIP server address under the linked network configuration.**

**Q: I made changes and now my door station will not call my indoor stations?**  
**A: The Main door station acts as the SIP server and requires that each indoor station register to it. Reboot all indoor stations that are having an issue to resolve this problem.**

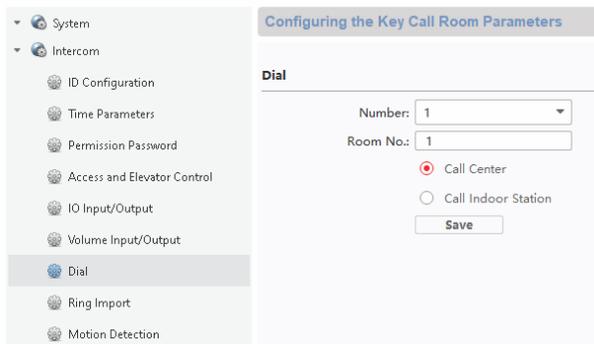
**Q: Where to find the Door release duration?**  
**A: Intercom > Access and Elevator Control > Door-unlocked Durations. (6-60sec)**

**Q: Why do the nametag module on my main module or the keypad module not light up?**  
**A: The buttons only light up when the main module is in night mode.**

**Q: Does the camera module have IR?**  
**A: Yes, there are 2 IR LEDs found underneath the black ring that surrounds the main lens. It is not visible to the naked eye.**

**Q: Can I add the M201-C module to my NVR/DVR?**  
**A: Yes, you can add it on to NVRs/DVRs and it will also record on motion.**

## Remote Configuration



**Configuring the Key Call Room Parameters**

**Dial**

Number: 1

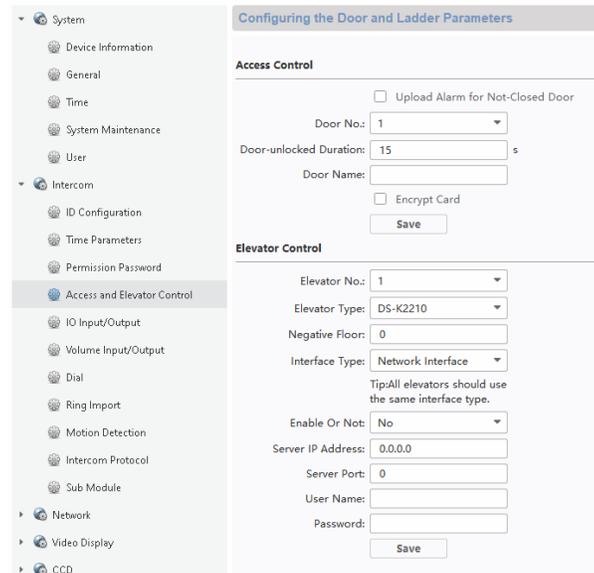
Room No.: 1

Call Center

Call Indoor Station

**Save**

## Remote Configuration



**Configuring the Door and Ladder Parameters**

**Access Control**

Upload Alarm for Not-Closed Door

Door No.: 1

Door-unlocked Duration: 15 s

Door Name:

Encrypt Card

**Save**

**Elevator Control**

Elevator No.: 1

Elevator Type: DS-K2210

Negative Floor: 0

Interface Type: Network Interface

Tip: All elevators should use the same interface type.

Enable Or Not: No

Server IP Address: 0.0.0.0

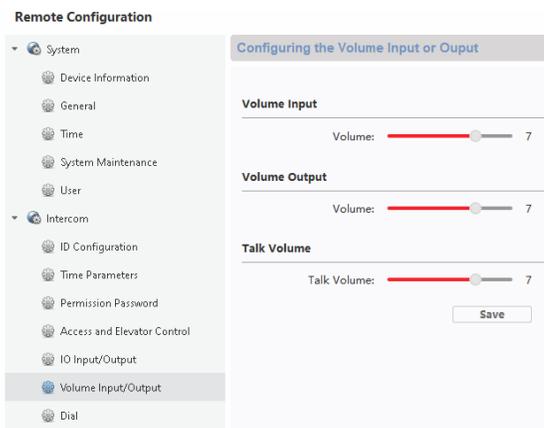
Server Port: 0

User Name:

Password:

**Save**

## Reference



**Remote Configuration**

**Configuring the Volume Input or Output**

**Volume Input**

Volume: 7

**Volume Output**

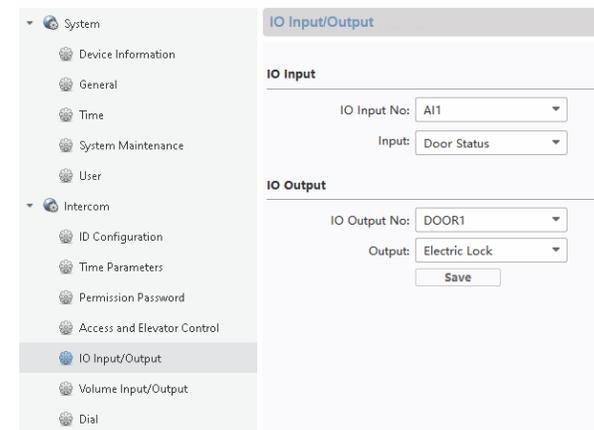
Volume: 7

**Talk Volume**

Talk Volume: 7

**Save**

## Remote Configuration



**Remote Configuration**

**IO Input/Output**

**IO Input**

IO Input No: AI1

Input: Door Status

**IO Output**

IO Output No: DOOR1

Output: Electric Lock

**Save**



**Remote Configuration**

**Configuring the Time Parameters**

**Time Parameters**

Device Type: Door Station

Max. Speaking Duration: 90 s

Max. Message Duration: 30 s

**Save**