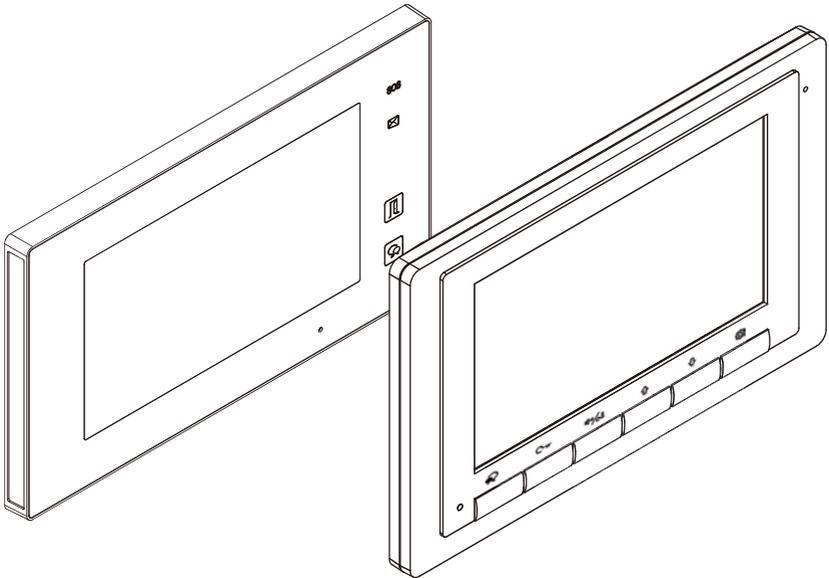


# 2-Wire System Quick Guide



## Note!

- Due to newer software and chips, the functions and parameters have changed.
- Please read this manual carefully before using the product you purchase, and keep it well for future use.
- Please note that images and sketch maps in this manual may be different from the actual product.

# 1. How to increase the unlock time

## 1. 1 Set the unlock time via Monitor DX471 and DX47

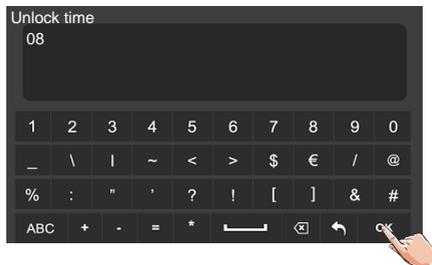
Step 1. On main menu page, touch the **Setting** icon, and then touch **Installer** item to enter installer page.



Step 2. Select **Unlock time** item to set.

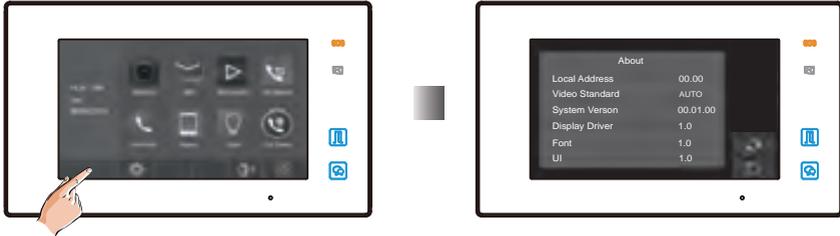


Step 3. The Installer Setup with keypad will show up. Then input number from 01-99 and touch OK to set the unlock time as 1-99 seconds.



## 1.2 Set the unlock time via Monitor DT47MG(V2)

Step 1. On main menu page, touch **Logo** icon to enter **About** page.



Step 2. When the screen stay in **About** page, press **UNLOCK** button on front panel and hold for 2 seconds.



Step 3. The Installer Setup will show up.



Step 4. Input number 8401~8499 to set the unlock time as 01~99 seconds.

# Information for Setting the Unlock Time:

## Setting the Unlock Time on an Entry Panel:

Unlock Time refers to the amount of time that the door is open to allow a visitor to enter. The Entry Panel default is 5 seconds which is adequate for most installations. When a longer time is required the setting can be increased.

Generally, the preferred method for changing the Unlock Time is directly on the Entry Panel.

Refer to the installation manual of the Entry Panel for information.

Note: setting methods vary between Entry Panel models.



*DT-17S*



*DT-433*

## Setting Unlock Time On the Monitor Station:

Current DT-17S and DT-433 Monitor Stations have a default setting of five (5) seconds and do not support changing the Unlock Time from the Monitor.

The five second time matches the default setting of Entry Panels and is adequate for most systems.

Previous DT-17S and DT-433 versions allowed changing the Unlock Time from a Monitor Station (up to 99 seconds). Refer to the next several pages to determine the Software Update Version.

There is also information for changing Unlock Times on the previous DT-17S and DT-433 Monitor Station versions.

# Software Update Version Information:

**Current Monitor Version:** Due to a manufacturing change, current DT-17S and DT-433 monitors no longer allow changing the Unlock Time through the menu settings and have a fixed five (5) second Unlock Time. These monitors have a Software Update Version of 04.00.00 or higher.

Several other methods are available for setting the Unlock Time. See the next several pages for the full list.

**Previous Monitor Versions:** the Unlock Time setting can be changed through the settings menu. These are monitors have a Software Update Version lower than 04.00.00.

Verify the Software Update Version to determine if the DT-17S or DT-433 monitor is the previous or current model.

Use the instructions below to check the software version:



*DT-17S About Page*



*DT-433 About Page*

Instructions for verifying the Software Update Version number:

1. Start in Standby Mode (Monitor connected with screen off).
2. Press the Settings Button  To enter the Main Menu.
3. From the main menu press the  Settings Button 6 more times to enter the About page.
4. The Software Update Version is listed on the About page.

See the next several pages for information on how to set Unlock Time on both current and previous models.

# Setting the Unlock Time on a Previous Version DT-17S or DT-433 Monitor Station:



Main Menu



About Screen



Installer Setup

Screens are similar for both the DT-17S and DT-433 Monitors.

## Applies to DT-17S and DT-433 Monitors with a Software Update Version lower than 04.00.00 (previous models).

Entry Panels have a default Unlock Time of 5 seconds. When the Unlock Time is changed from a Monitor Station the Entry Panel Unlock time is updated. The new setting will apply to the Entry Panel throughout the system.

Use these steps to set the Unlock Time from the Monitor:

1. Start in Standby Mode (Monitor connected with screen off)
2. Press the Settings Button  to display the Main Menu.
3. From the Main Menu press the  Settings Button until the About screen is active.
3. From the About page, press the Unlock Button  and hold for 2 seconds.
4. The Installer Setup screen allows setting the Unlock Time using codes from 8401 to 8499, select from 1 to 99 seconds using the codes (example: 10 seconds = 8410 code).
5. Use the up and down Arrow Buttons   to increase or decrease the value.
6. Press the Next Button,  this will update the Entry Panel and exit the set-up screen.

# Methods for Setting the Unlock Time using a Current DT-17S or DT-433 Monitor Station:



*DT-17S*



*DT-433*

## **Applies to DT-17S and DT-433 Monitors with Software Update Version 04.00.00 or higher (current models).**

DT-17S and DT-433 Unlock Time is fixed at five (5) seconds. This setting matches the default Unlock Time for various Entry Panels. Five (5) seconds is adequate for most installations.

## **Available Options for Setting the Unlock Time:**

1. Set the Unlock Time Directly on the Entry Panel:
  - Entry Panels that are used with DT-17S and DT-433 Monitors are: DT-607 series, DMR11S/SA, DMR18S, DT-821 Series and DT-608 Series. Each of these Entry Panels support Unlock Time setting directly.
  - Refer to the Entry Panel Installation Manual (setting methods vary).
2. Set the Unlock Time using a different Monitor Station:
  - Use DX-47, DX-471, DT-471 or DT-47MG Monitor Stations.
  - Refer to Installation Manuals (setting methods vary).
3. Use the 2Easy DT-RLC Multi-Purpose Relay to control the unlock time. Requires connection to the two-wire bus. Refer to the DT-RLC Manual.
4. Use the NY3 12VDC or NY4 24VDC Timer/Relay (next page).

# Use a Separate NY3 or NY4 Timer/Relay: Works with DT-17S, DT-433 and Entry Panels.

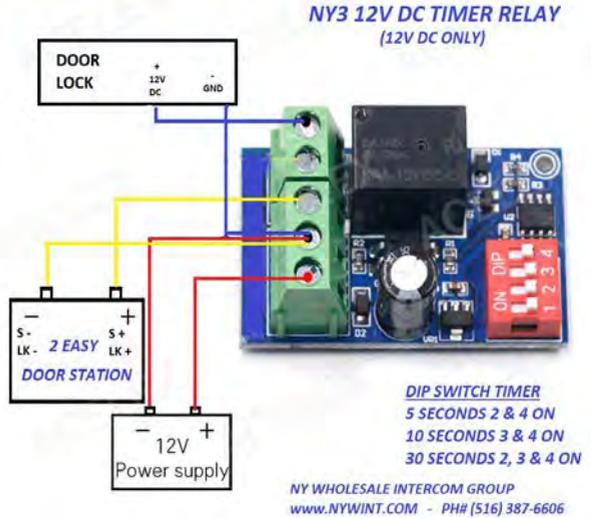
**Two Versions, 12VDC or 24VDC are Available.**

Connects to the Entry Panel, Door Strike and a power supply.

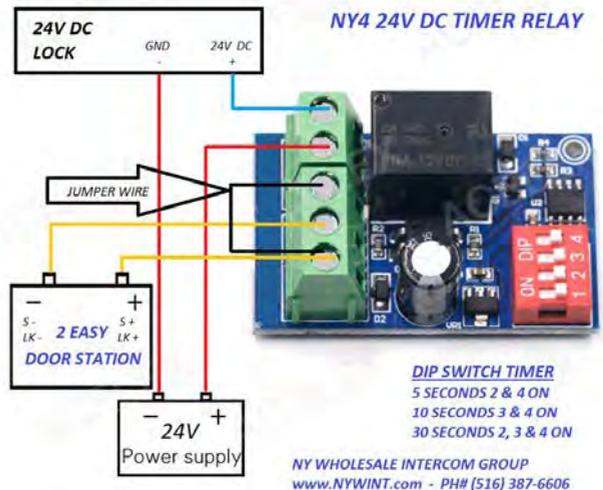
Mount near the Entry Panel and door strike for simple installation.

Use with any strike that can be powered using a 12VDC or 24VDC power supply.

## Wiring instructions



## Wiring instructions



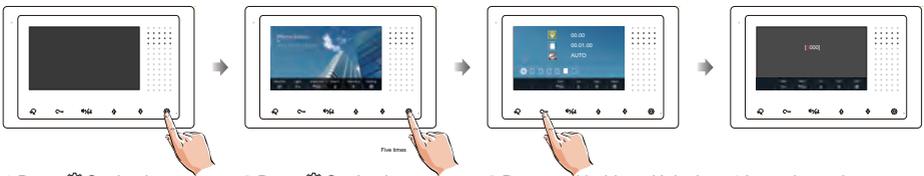
## 2. How to set a monitor as Master or Slave

For each apartment, could set 1 Master and max 3 Slaves.  
And WIFI monitor DX47 can only work as Master. Other monitors can work as Master or Slave.

Operation as below.

Input 8000 to set it as Master, input 8001-8003 to set it as Slave 1-3.

### DT433



1. Press Setting button in standby mode.

2. Press Setting button five times.

3. Press and hold Unlock button for 3s.

4. Input the code.

### DT17S



1. Press Setting button in standby mode.

2. Press Setting button six times.

3. Press and hold Unlock button for 3s.

4. Input the code.

### DT47MG

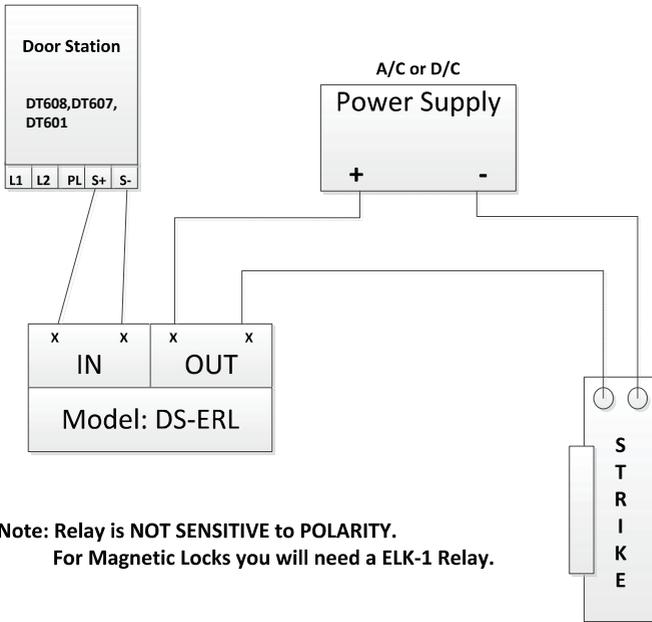


1. On main menu page, touch Logo icon to enter About page.

2. When the screen stay in About page, press UNLOCK button on front panel and hold for 2 seconds.

3. Input the code.

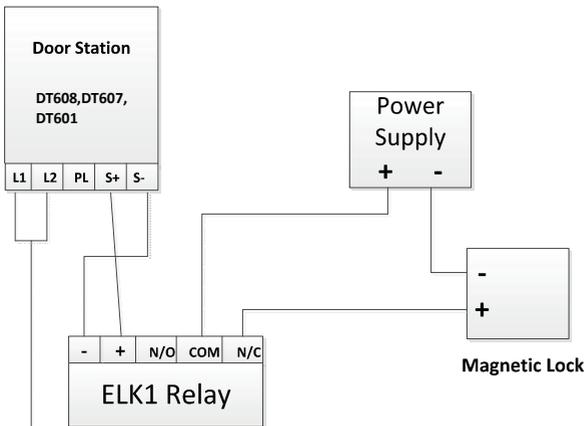
### 3.1 DT608, DT607, DT601



For A/C or D/C door releases HINTS. Match the door release Input Voltage to power source.

Power Release	Door
A/C	= A/C
D/C	= D/C
12vDC	= 12vDC
24vDC	= 24vDC
$\infty$ 16vA/C	= $\infty$ 16vA/C

**Note:** Relay is NOT SENSITIVE to POLARITY.  
For Magnetic Locks you will need a ELK-1 Relay.



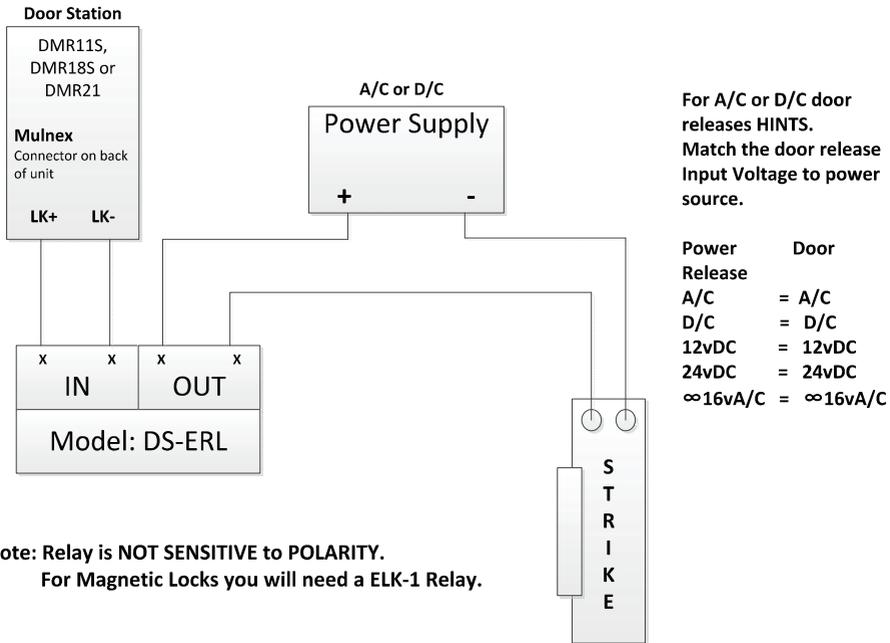
Power Supply can be A/C or D/C as long as it matches the needs of the magnetic lock.

By hooking up the ELK1 to the door release this saves the outdoor station from being damaged which is NOT covered by the warranty!

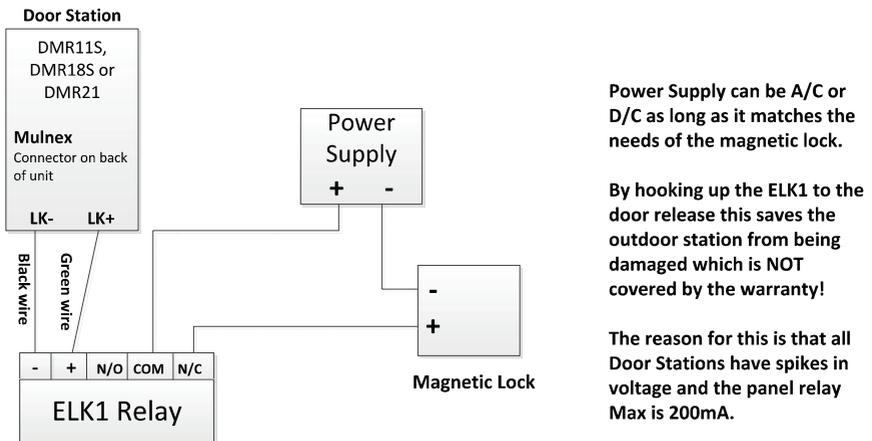
The reason for this is that all Magnetic Locks have more than 200mA and the panel relay Max is 200mA.

**Note:** Bus (L1, L2) to DT-DPS or DBC4A1 if you have more than 1 door station.

### 3.2 DMR11S, DMR18S, DMR21



**Note:** Relay is NOT SENSITIVE to POLARITY.  
For Magnetic Locks you will need a ELK-1 Relay.



**Note:** The mulnex Connector is located on the back of the outdoor station, and the black wire used for the connection is the second wire from the top next to the green wire.

## 4. Operation Guide On Power Supply for 2 Wire System

There are two UL power supplies can be used in 2-wire system.

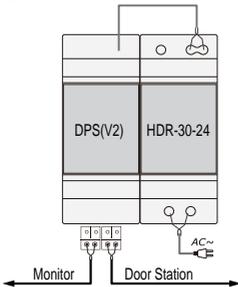
Both PC7 and PC7H power supply unit has won UL approvals,with UL File Number E183223.

It is designed for 2-wire system to support Max.32 Monitors and Max. 4 Door Stations at the same time, depending on different environments.

- Universal AC input/full range.
- Multi protection: short circuit, overload, over voltage.
- Cooling by free air convection.
- DIN rail mounting.

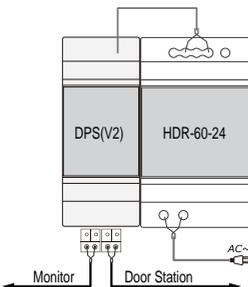
### DIN Installation

#### PC7



Input Voltage:	100~240Vac
Input Frequency:	50~60Hz
Rated Output Voltage:	DC 28V
Rated Output Current:	1.5A
Working Temperature:	-100C~500C
SW Port Input Voltage:	Max.230Vac, 1.5A
Dimension:	70*98*59mm

#### PC7H



Input Voltage:	100~240Vac
Input Frequency:	50~60Hz
Rated Output Voltage:	DC 28V
Rated Output Current:	2.5A
Working Temperature:	-100C~500C
SW Port Input Voltage:	Max.230Vac, 2.5A
Dimension:	88*98*59mm

# ONE AND TWO APARTMENT SET-UP

## 5. Monitor User Code Setup

There are 2 kinds of Door Station in 2 wire system.

The first one is Villa Door station, which is only 1-2 buttons, such as DT607C-S1, DT607-C2, DT607FE-S1, DT607FE-S2, Use for 1-2 families.

The second one is Apartment Door Station, which is multiple buttons or keypad buttons, such as DMR11S, DMR21, DMR18S, DT608, DT607FE-S3, DT607FE-S4. Use for more than 3 apartments.

The monitor user code setup will be different when work with villa door station or apartment door station.

### 5.1 Monitor User code Setup when work with Villa Door Station

ONE APT: DK43311, DK43321. DK1711S, DK1721S. DX4711M, DX4721M.

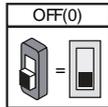
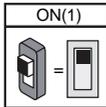
TWO APT: DK43322, DK1722S, DX4722M

[1] For APT 1, start at 0-15 (switch all DOWN).

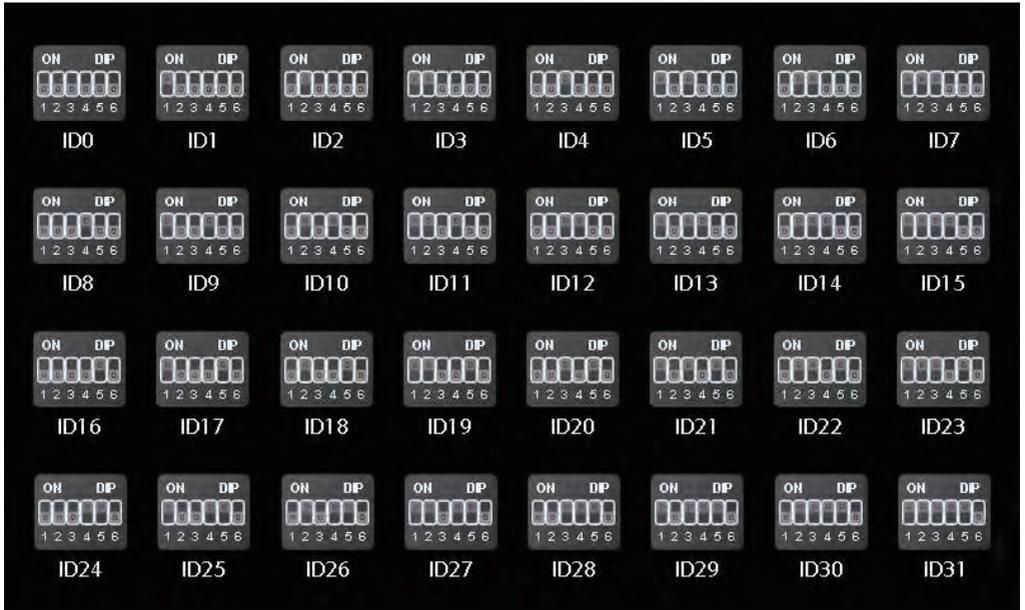
[2] For APT 2, start at 16-31 (switch 5 ON).

[3] When use IN-OUT wiring without any distributor, switch 6 ON for last monitor on the line.(see page 9-10 for the examples).  
When use Star wiring with distributor, switch 6 ON for every monitor. (See page 11 for the examples).

Bit-6 line terminal setting:



Bit state	Setting	Bit state	Setting
	Monitor not at the end of the line.		Monitor at the end of the line.

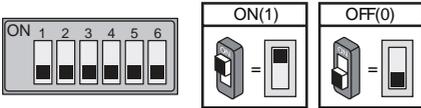


# THREE AND ABOVE APARTMENT SET-UP

## 5.2 Monitor User Code Setup when work with Apartment Door Station (DK43331, DK1731, DX4731M and above)

The user code of monitors should start from 1-32. Generally one button of door station can call one monitor with the according address.

Bit-6 line terminal setting:



Bit state	Setting	Bit state	Setting
	Monitor not at the end of the line.		Note: When using distributor DBC4A or riser DBC4R, all monitors' DIP6 should be ON.

Bit state	User Code	Bit state	User Code	Bit state	User Code
	Code=1		Code=12		Code=23
	Code=2		Code=13		Code=24
	Code=3		Code=14		Code=25
	Code=4		Code=15		Code=26
	Code=5		Code=16		Code=27
	Code=6		Code=17		Code=28
	Code=7		Code=18		Code=29
	Code=8		Code=19		Code=30
	Code=9		Code=20		Code=31
	Code=10		Code=21		Code=32
	Code=11		Code=22		

# 6. Wirings for villa and multiple apartments

## 6.1 Wiring for villa

The 2 wire villa system usually use 1-2 buttons door station, for 1-2 families.

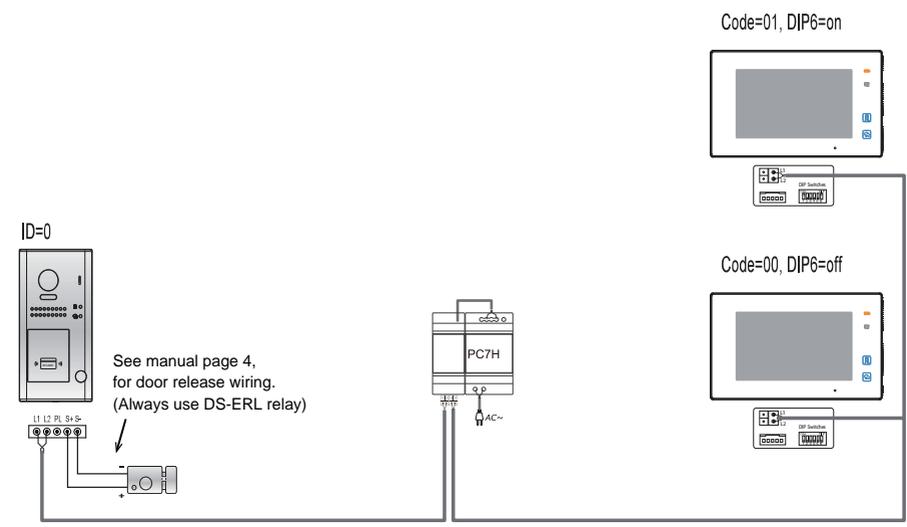
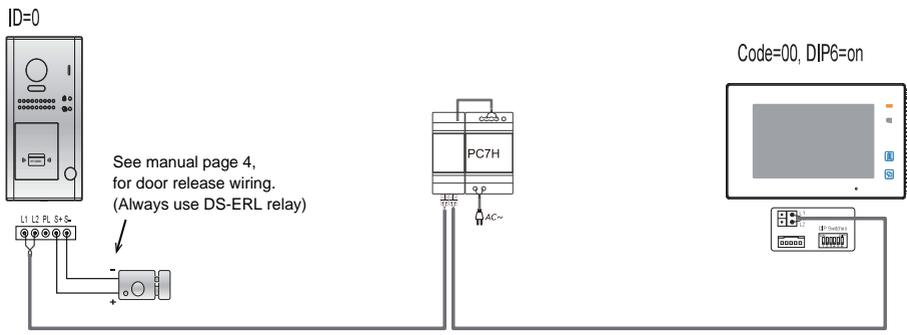
[1] For one button door station, the code address of indoor units start at 0-15 (switch all DOWN).

[2] For two buttons door station, the code address of indoor units start at16-31 (switch 5 ON).

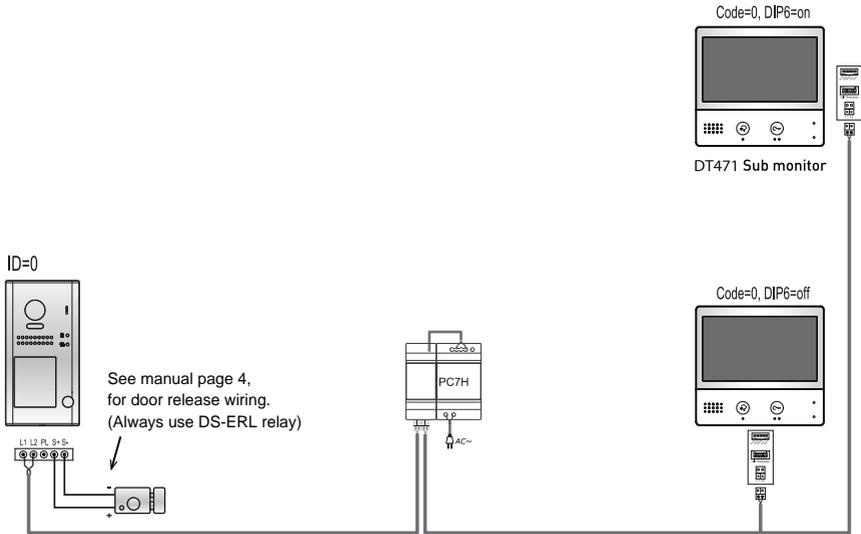
[3] When use IN-OUT wiring without any distributor, switch 6 ON for last monitor on the line.

When use Star wiring with distributor, switch 6 ON for every monitor.

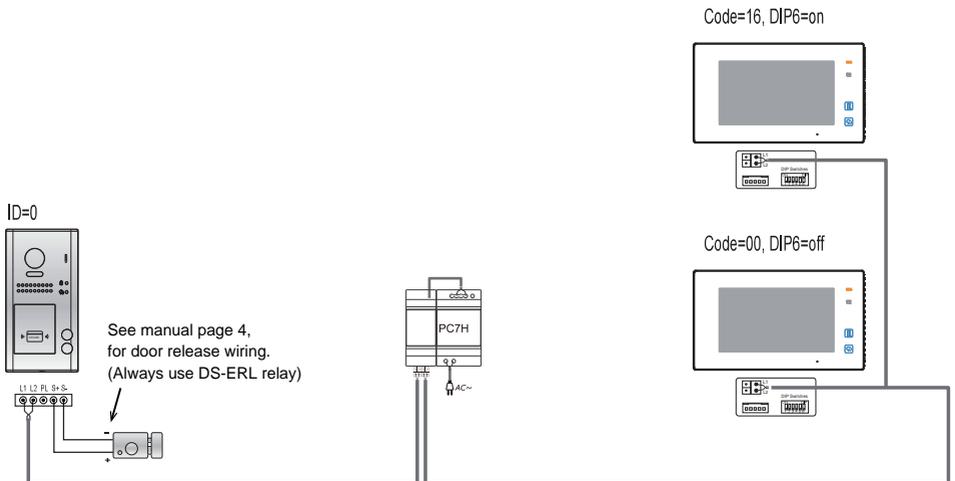
### One Apartment Connection(DK43311, DK1711S, DX4711M)



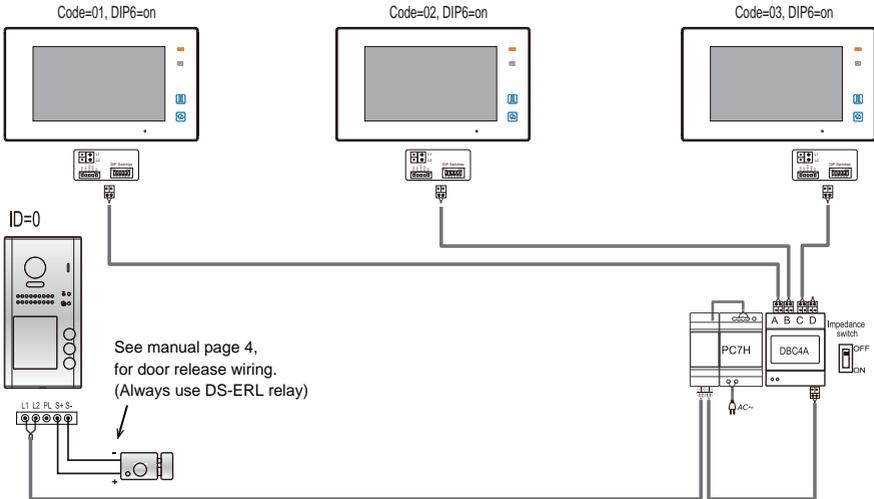
## Special One Apartment Connection (1 Master and 1 Sub monitor. DK43321, DK1721S, DX4721M)



## Two Apartments Connection (DK43322, DK1722S, DX4722M)



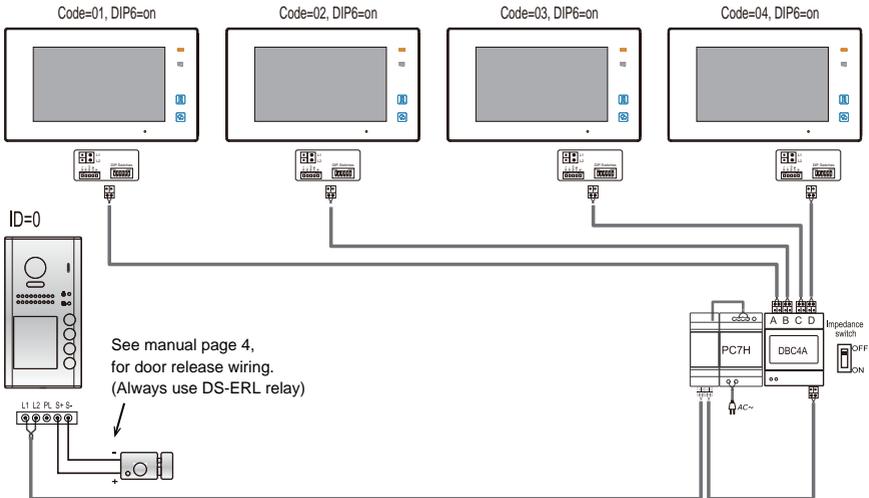
## Three Apartments Connection(DK4331, DK1731S, DX4731M)



### Note:

For monitors without WIFI, such as DT433, DT17S, could use DBC4A,  
For WIFI monitor DX47, should use DBC4R.

## Four Apartments Connection(DK43341, DK1741S, DX4741M)



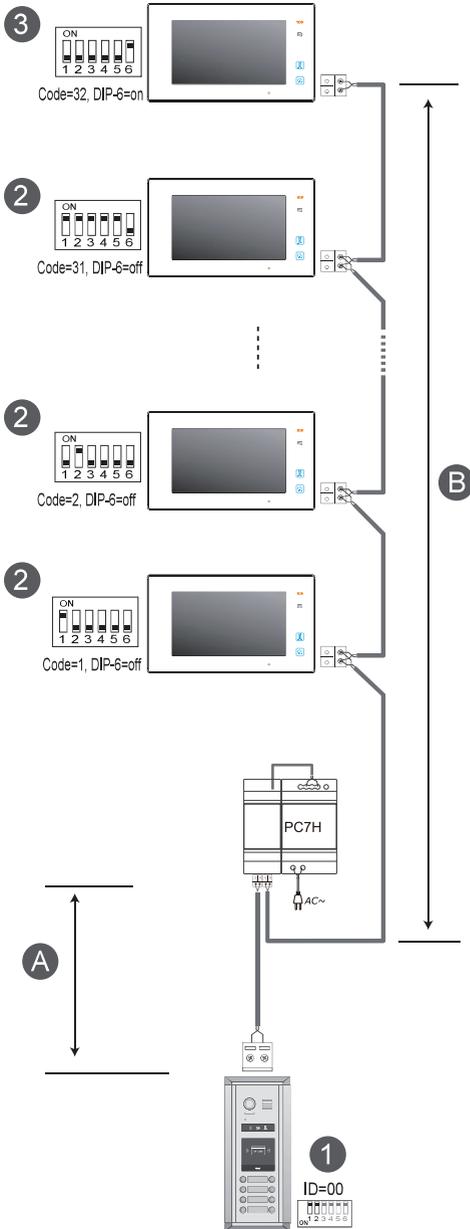
### Note:

For monitors without WIFI, such as DT433, DT17S, could use DBC4A,  
For WIFI monitor DX47, should use DBC4R.

## 6.2 Wiring for Multiple Apartments (Daizy chain wiring)

### 6.2.1 IN-OUT wiring without any distributor

Note: This is for monitors without WIFI, such as DT433,. DT175. For WIFI monitor DX47, please check 5.2.3 (page 14)



**[1]:** Door Station, when there is only one Door Station, the DIP bit-1 and bit-2 should be set to 00.

**[2]:** Monitor, each one with a unique User Code (Max.32 Monitors), the bit-6 of the DIP should be set to 0 (off) if the Monitor is not at the end of the bus line.

**[3]:** Monitor, the bit-6 of the DIP should be set to 1 (on) if the Monitor is connected at the end of the bus line.

When Monitor quantity < 20

Cable Usage	A	B
Twisted cable 2x0.00116 sq.in	196ft	196ft
Twisted cable 2x0.00155 sq.in	262ft	262ft

When Monitor quantity > 20

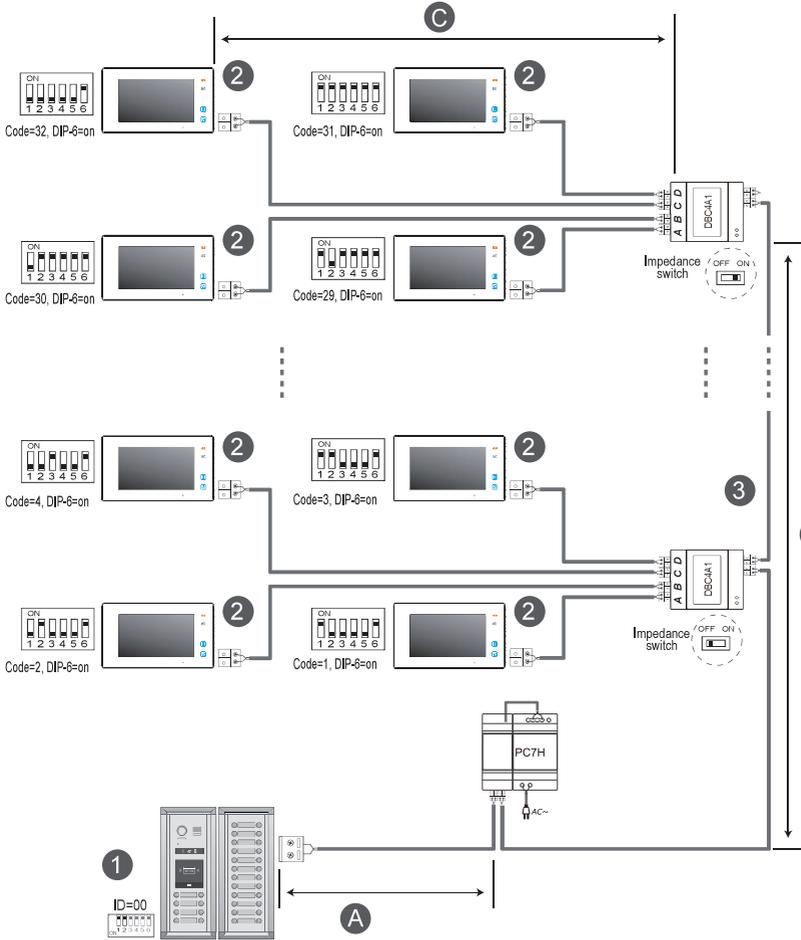
Cable Usage	A	B
Twisted cable 2x0.00155 sq.in	229ft	98ft
Twisted cable 2x0.00233 sq.in	229ft	164ft

Note: The thicker the copper wire is, the longer distances will be. Best wire to use is 18 Gauge twisted, while Cat 5 or 6 are not recommended.

NOTE: Here we take DT47MG(the monitor) for example.

## 6.2.2 Star wiring with 4 output distributor DBC4A1(Home run wiring)

Note: This is for monitors without WIFI, such as DT433.. DT175. For WIFI monitor DX47, please check 5.2.3 (page 14)



[1]: Door Station, when there is only one Door Station, the DIP bit-1 and bit-2 should be set to 00.

[2]: Monitor, each one with a unique User Code, note that all the bit-6 of the DIP should be set to 1 (on) in this case.(Max.32 Monitors)

[3]: 4 output distributor DBC4A1,Impedance switch of all DBC4A1 should be set to OFF, except the last DBC4A should be set to ON

NOTE: Here we take DT47MG(the monitor) for example.

When Monitor quantity < 20

Cable Usage	A	B	C
Twisted cable 2x0.00116 sq,in	196ft	196ft	98ft
Twisted cable 2x0.00155 sq,in	262ft	262ft	131ft

When Monitor quantity > 20

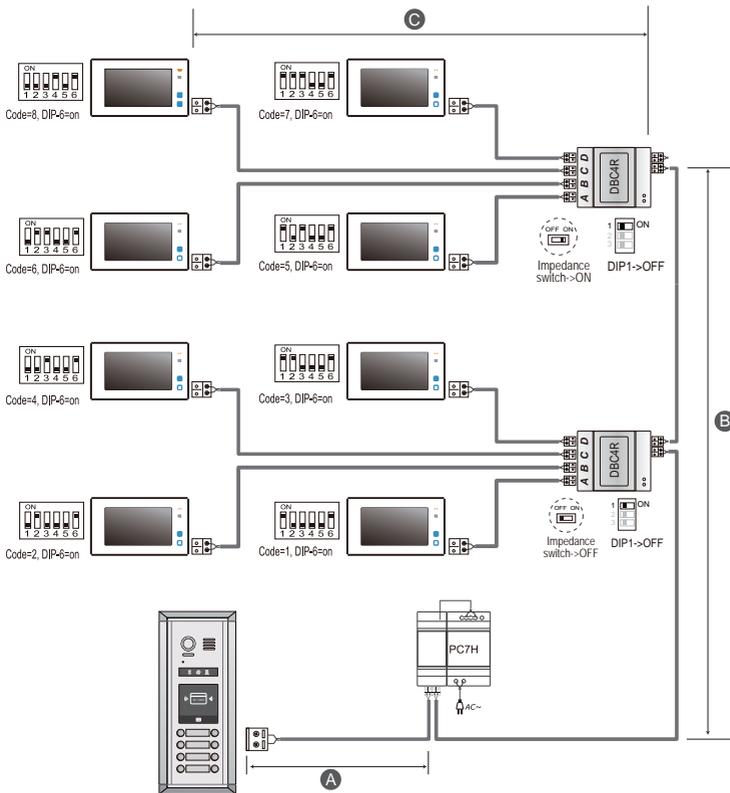
Cable Usage	A	B	C
Twisted cable 2x0.00155 sq.in	229ft	98ft	65ft
Twisted cable 2x0.00233 sq,in	229ft	164ft	98ft

Note: The thicker the copper wire is, the longer distances will be. Best wire to use is 18 Gauge twisted, while Cat 5 or 6 are not recommended.

## 6.2.3 Star wiring with 4 output riser DBC4R (For WIFI monitor DX47, home run wiring)

### Multiple Monitors Connection with Distributor DBC4R

- [1]: Door Station, when there is only one Door Station, the DIP bit-1 and bit-2 should be set to 00
- [2]: Power Supply(PC7H).
- [3]: Monitor, each one with a unique User Code, note that all the bit-6 of the DIP should be set to 1 (on) in this case.(Max.8 Monitors).
- [4]: 4 output distributor DBC4R,Impedance switch of all DBC4R should be set to OFF, except the last DBC4R should be set to ON.



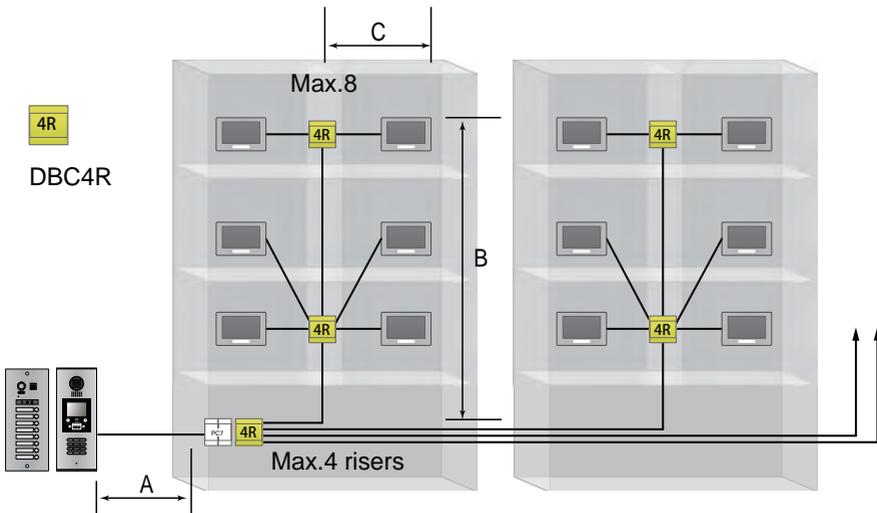
**WARNING:** Not using the DS-ERL relay could damage the unit unless it is less than 200mA.

Note: The thicker the copper wire is, the longer distances will be. Best wire to use is 18 Gauge twisted, while Cat 5 or 6 are not recommended.

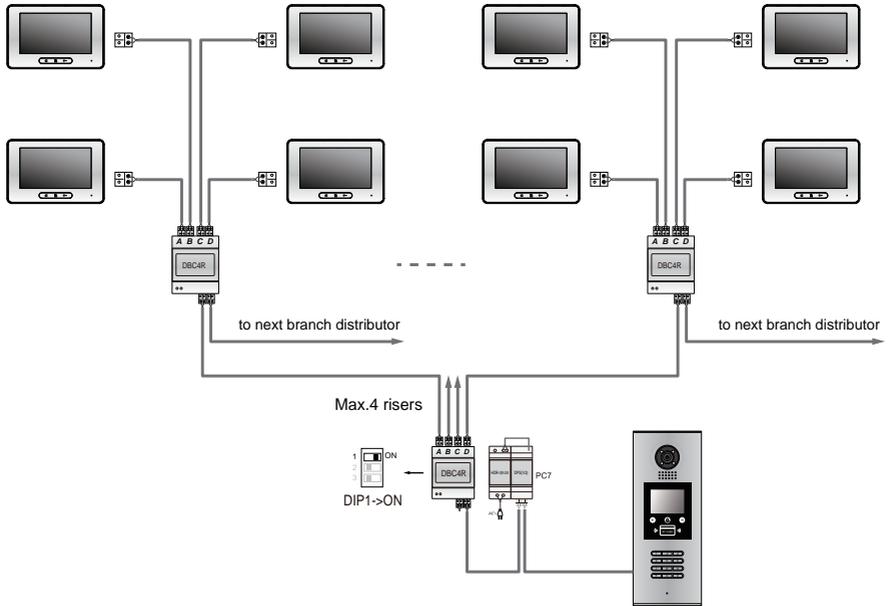
Cable Usage	A	B	C
Twisted cable 2x0.00116 sq.in	196ft	196ft	98ft
Twisted cable 2x0.00155 sq.in	262ft	262ft	131ft

### 6.2.4 Riser wiring with DBC4R

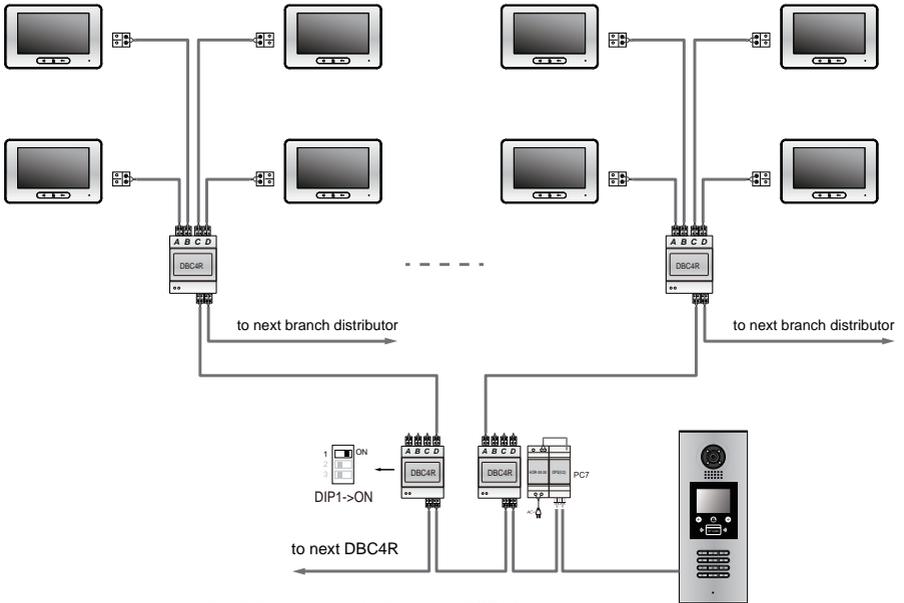
Cable Usage	A	B	C
Twisted cable 2x0.00116 sq.in	246ft	213ft	98ft
Twisted cable 2x0.00155 sq.in	262ft	230ft	115ft



Wiring diagram:



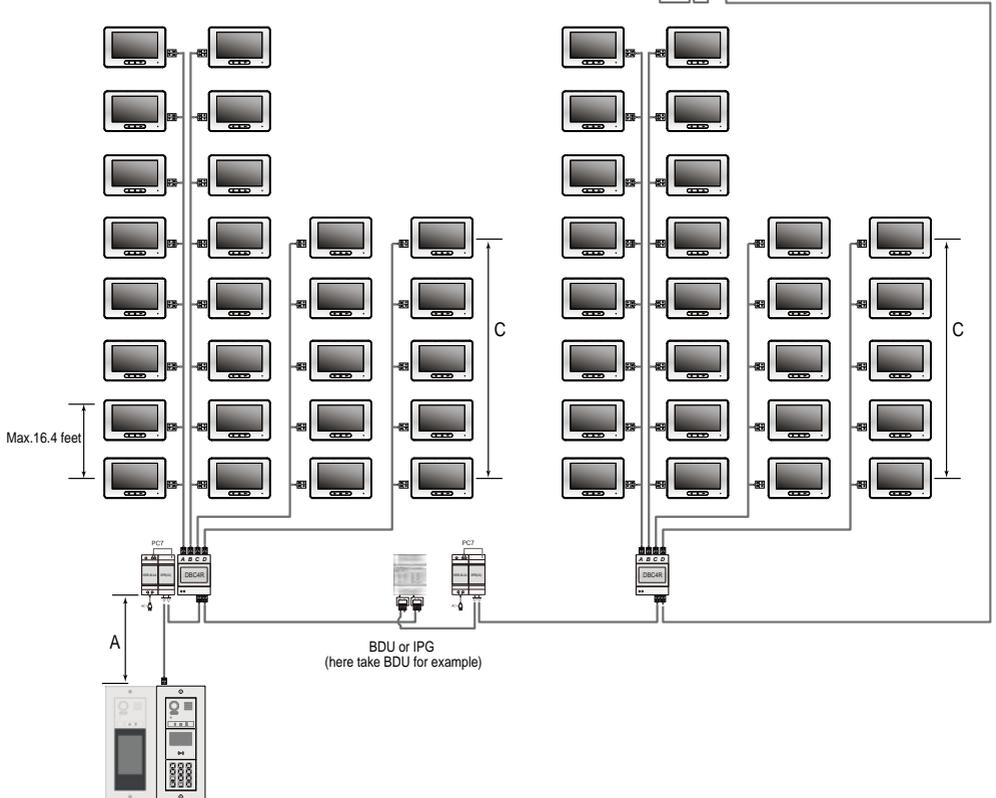
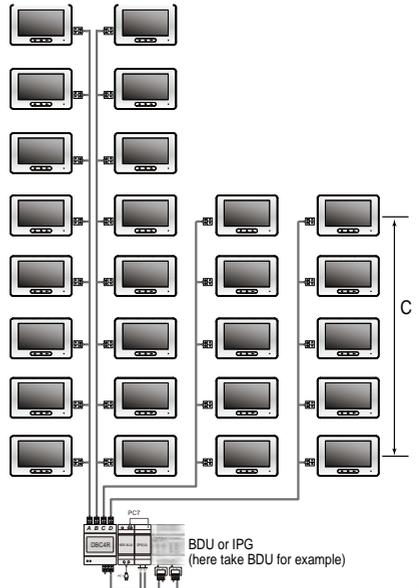
Wiring diagram:



\* The DIP1 should set to "ON" for all DBC4R.

# Wiring diagram:

Max 6-8 monitors on one line  
Using proper wire



We have done from 8-190 apartments this way. But IPX system is recommended for larger systems.

## 7.How to hook up with a BDU

Limits of distance (based on 18 Gauge Wire)

A: From door station to power supply, max 98 feet.

B: From power supply to the first BDU, max 164 feet.

C: The distance between 2 BDU, max 26 feet.

D: In the same BDU zone, the distance from first DBC4A1 to the last DBC4A1, max 230 feet

E: From DBC4A1 to the furthest indoor monitor, max 98 feet.

### Capacity

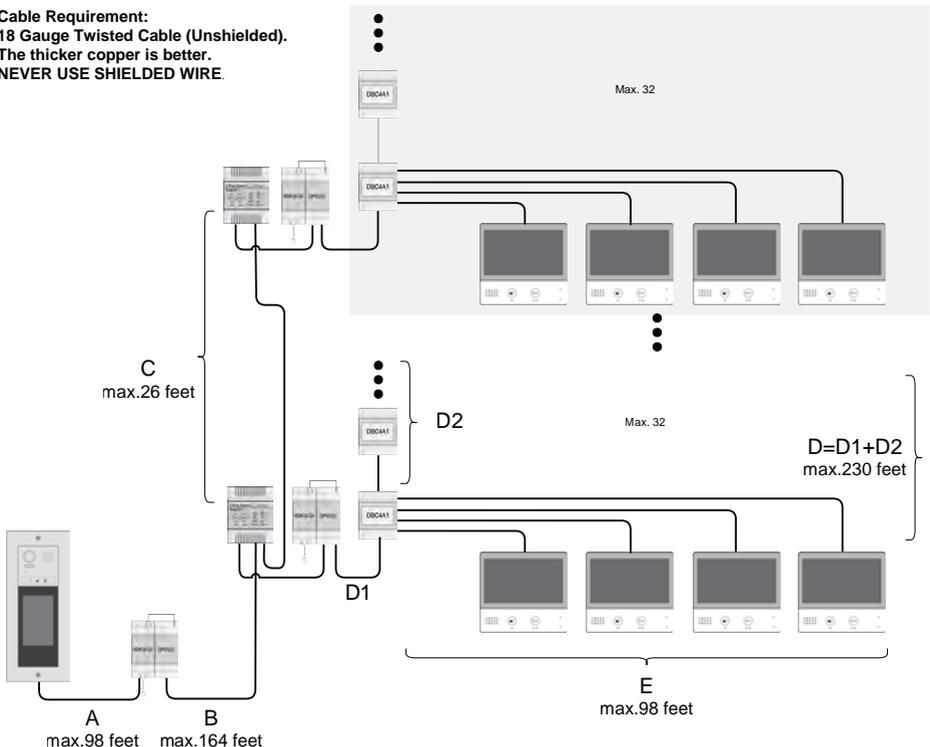
Max 8 BDU zones, Max 32 DT monitors each BDU, So max. 256 DT monitors (P.S. If less than 20 monitors in a BDU, could use PC7. If more than 20 monitors in a BDU, should use more powerful PC7H).

But for monitors with higher power consumption, the capacity is smaller ---

Max 8 DX monitors (WIFI monitor) each BDU. And must use DBC4R distributor (not DBC4A1)

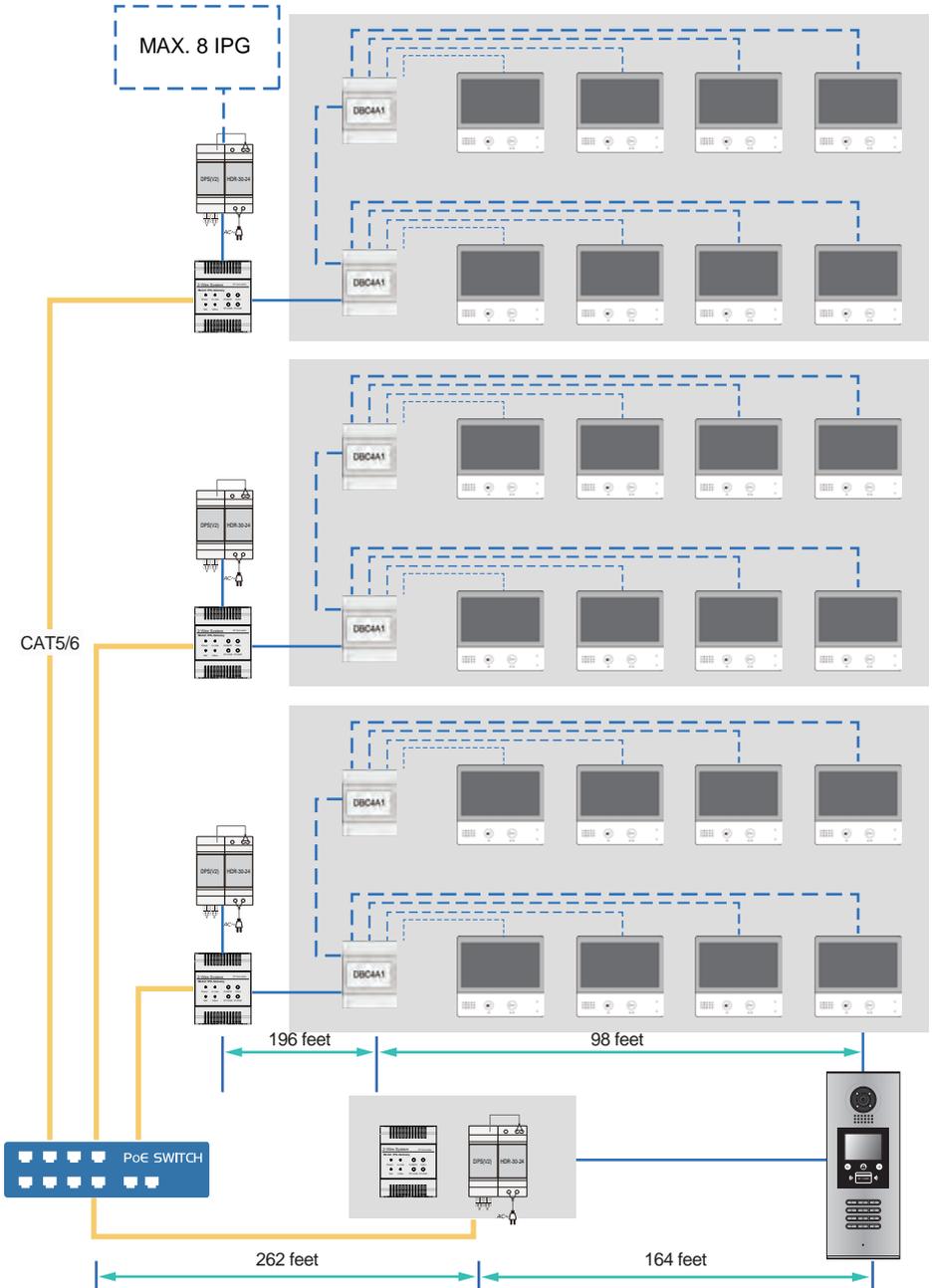
Max 12 DT47MG each BDU.

**Cable Requirement:**  
18 Gauge Twisted Cable (Unshielded).  
The thicker copper is better.  
**NEVER USE SHIELDED WIRE.**



## 8. How to hook up with a IPG

IPG could extend the capacity for all 2 wire monitors, but the results are not the same because power consumption of monitors are various.



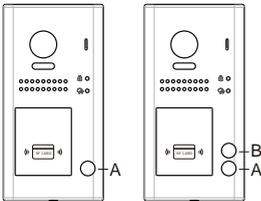
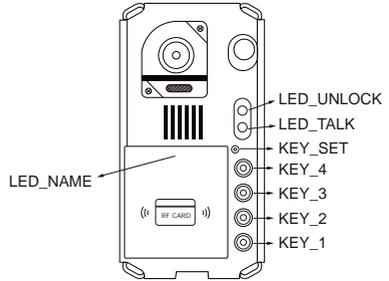
## 9. Setup for push buttons

The section explains how to program push buttons of door station DT607 series, DMR11S series, so each button can call corresponding monitor or monitors.

### 9.1 Programming buttons for DT607 series

First step, you should remove metal front panel/cover. Check sketch map on the right.

Each operation is indicated by the lighting up of the LED indicator on the unit, and by the sounding of the buzzer.



#### 1. One-to-many call (by default)

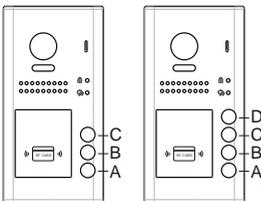
**Call button A:** Call all monitors in group address from **00~15**. (one of the monitor should be set to **00**).

**Call button B:** Call all monitors in group address from **16~31**. (one of the monitor should be set to **16**).

#### 2. One-to-one call

**Call button A:** call the monitor with address **01** only.

**Call button B:** call the monitor with address **02** only.



#### 1. One-to-one call (by default)

**Call button A:** call the monitor with address **01** only.

**Call button B:** call the monitor with address **02** only.

**Call button C:** call the monitor with address **03** only.

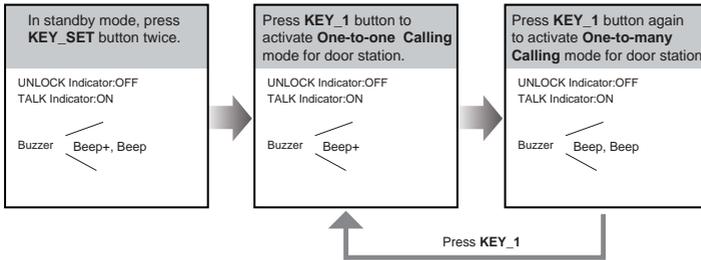
**Call button D:** call the monitor with address **04** only.

#### 2. One-to-many call

**Call button A:** Call all monitors in group address from **00~15**. (one of the monitor should be set to **00**).

**Call button B,C,D:** Each all monitors in group address from **16~31**. (one of the monitor should be set to **16**).

To change this setting, please follow the steps:



- If setting mode has not been exited, you can change the calling mode by pressing KEY1 circularly.
- The **LED\_NAME** indicator will blink all the time until exit out the setting mode.
- If without any operation in 10 seconds, it will exit out setting mode automatically.
- In this step,press **KEY\_SET** button three times to exit out the setting mode manually.

## 9.2 Programming buttons for DMR11S series

Step 1, Format the SD card (not more than 8G), and copy “Namelist.bin” **folder** to the root directory of SD card.

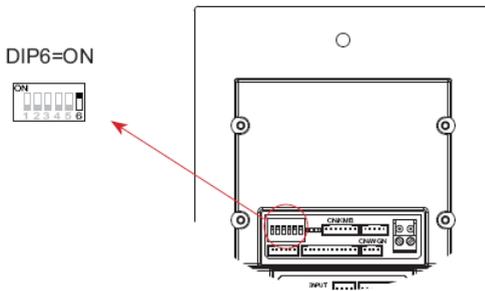
For DMR11S D2/D4/D6/D8 copy from “Namelist\_D2toD8”

For DMR11S D10/D12/D14/D16 copy from “Namelist\_D10toD16”

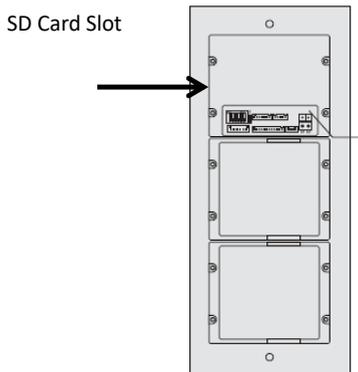
For DMR11S S1/S2/S3/S4 copy from “Namelist\_S1toS4”

For DMR11S S5/S6/S7/S8 copy form “Namelist\_S5toS8”

Step 2, Set DIP6 to ON before power up the unit.



Step 3, Power up the unit, and then insert the SD card on the side of DMR21.



Step 4, once the SD card is inserted, the update will automatically start, with sound long “Beep” twice means the update is successful.

Step 5, take out SD card, and Set DIP6 to OFF, and Set DIP4 to ON to activate the list.

Step 6, set DIP3 to ON for double row button, set DIP3 to OFF for double row button. That is,

For DMR11S S1/S2/S3/S4/S5/S6/S7/S8, set DIP3 to ON;

For DMR11S D2/D4/D6/D8/D10/D12/D14/D16, set DIP3 to OFF.

## **HOW YOU DELETE AND ADD A NEW MASTER CARD IF YOU LOSE THE MASTER KEYFOB**

For DT607 - power off at least 20s, power on, press and hold KEY\_SET for 3s, press KEY\_2, first card tap as ADD, second as DELETE

FOR DMR11S/DT821

- ① Connect EB+,EB-, switch DIP4 4 times, first card tap as ADD, second as DELETE
- ② Take a picture with your phone prior to turning all switch down

FOR TECHNICAL SUPPORT CALL  
1516-387-6606 FROM 9AM TILL 4PM  
MONDAY THRU FRIDAY  
OUR WEBSITE [WWW.NYWINT.COM](http://WWW.NYWINT.COM)