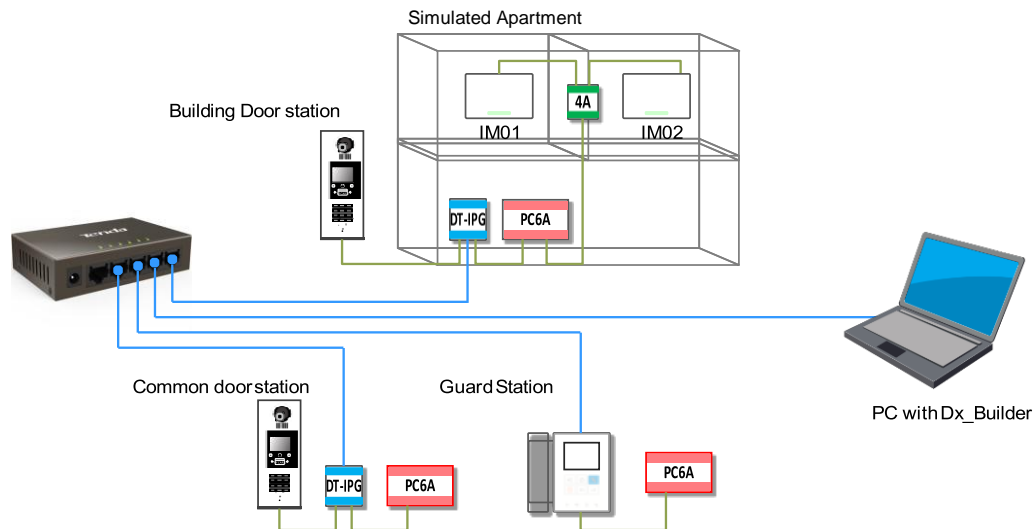# Quick Start Guide for Testing

The Quick Start Guide for Testing helps you to have a quick understanding of IPG system, and evaluate the basic function such as calling, monitoring and configuring the 2-Wire IP Network System

1. Testing system layout

With this minimal 2-Wire IP Network system, some major functions and operations as below could be tested:

1. Guard Station calling and monitoring.
2. Common Door station calling
3. Intercom between Monitor and Guard Station, surveillance from Monitor to Door stations.
4. Configure and diagnosis the system via DX_Builder
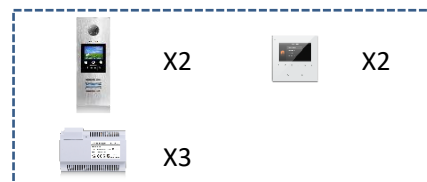
2. System Consists

This Evaluate Kit includes:

- 5 Ports LAN Switcher *1
- Cat5 Cable *4
- DPM-D246-IP *1
- DPA-D2-IPG *2
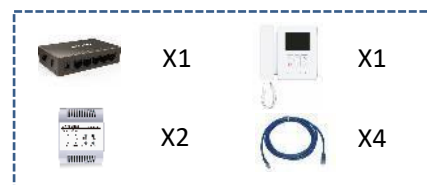
While you still need prepare below items:

- ✧ DPC-D218ID-S *2
- ✧ Indoor Monitor*2
- ✧ PC6A*3
- ✧ 2-Wire Cables

Note:

The Building door station could be replaced any pushbutton door station such as DPC-D221 and DPC-D268 series, while DPC-D218ID-S with numeric dialing and Namellist function. But you can still sign an empty call button for Guard Station, see Appendix 2.

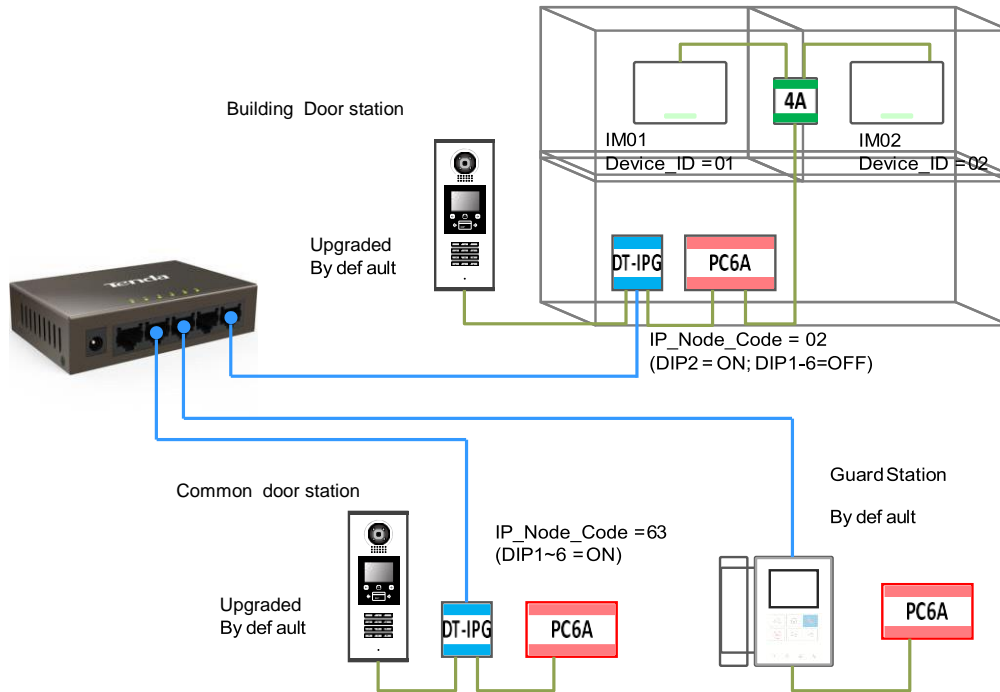*DPC-D218ID-S must upgrade to firmware version V000205 before test, see Appendix 1.*

Monitors could be wire as IN-OUT without DBC4A, and not need to upgrade

3. Wiring diagram
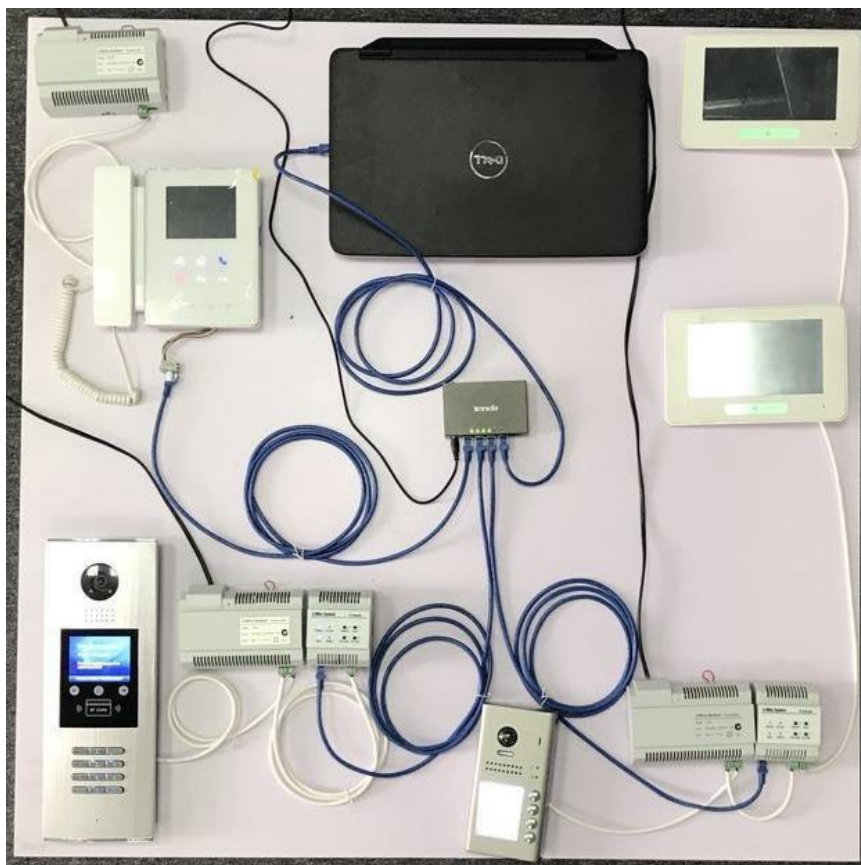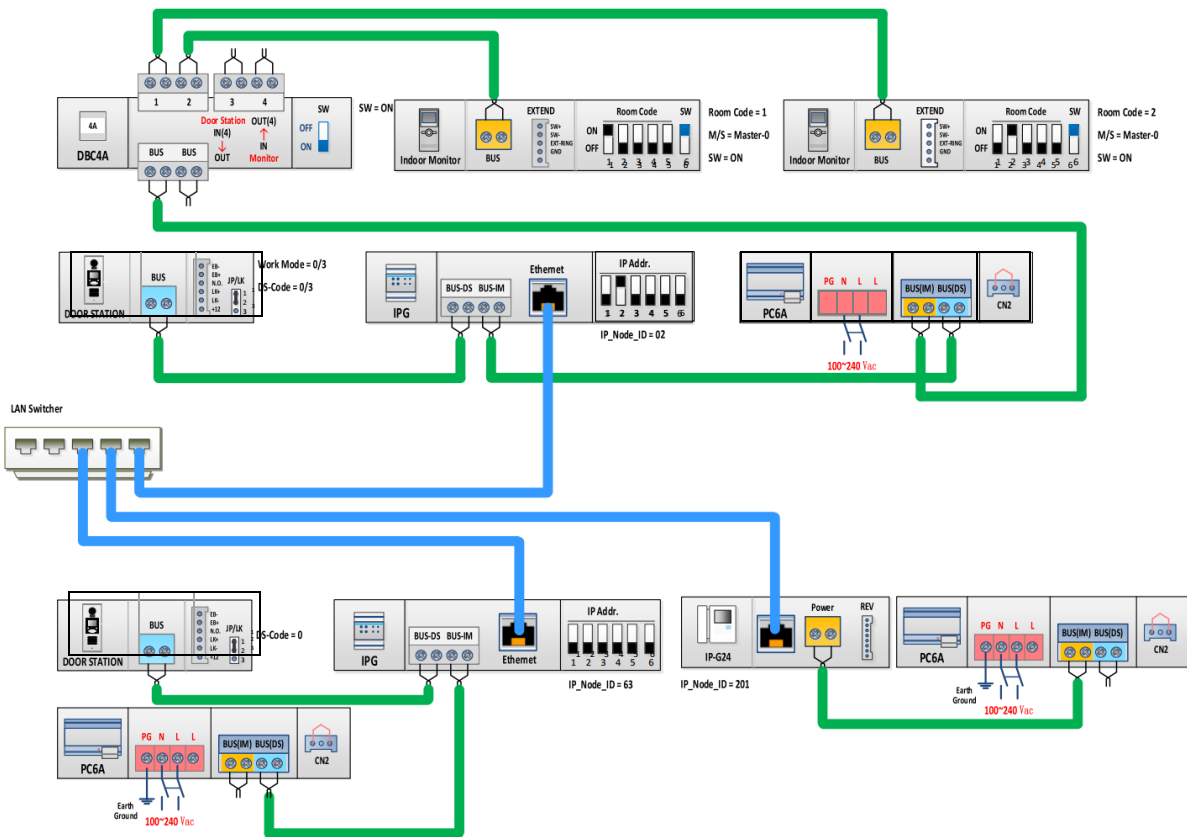
4. Test without configuration.

DPA-D2-IPG and DPM-D246-IP with built-in configuration allow users built the system without any complicated settings.

Basic settings:

Common Door Station

Only DMR8S can work as CDS, and it must be upgraded to firmware version V000205, see appendix.1

DPA-D2-IPG

IP_Node_ID configure by the DIP switches, set as the diagram, 63 and 01

Building Door Station

If using DPC-D218ID-S as BDS, it must be upgraded to version V000205, while using pushbutton (DPC-D221 and DPC-D268 series), is not required to do so. Door station's device id shall set to 00.

DBC4A

Video match set to ON as the last distributor.

Monitor

Monitors are work in apartment, set the address from 01 to 02.

Note:

After upgrade procedure as appendix.1, keep all DPC-D218ID-S as the default settings.

When pushbutton door station work as Building's door station, it is not able to call Guard Station without configure.

Enable auto calling or set the doorplate mode might disable the function for calling to Guard Station

5. Function test without configuration

Any below calling/surveillance function could be tested on the system you just set.

①→②③

Call from Building Door Station to Monitor
Enter 01 or 02 + # to call.

④→②③

Call from Building Door Station to Monitor
Enter 002001 or 002002 + # to call.

⑤→②③

Call from Guard Station to Monitor
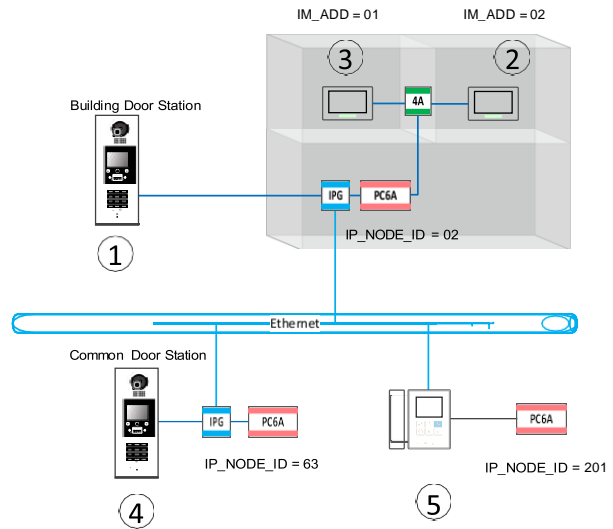Enter 002001 or 002002 and touch "Phone" icon to call.

②③→⑤

Call from Monitor to Guard Station
Select the "Call Guard Unit" in the intercom function to call.

①④→⑤

Call from Door Station to Guard Station
Enter 201000 + # to call.
Note: If using pushbutton door station is not able to call Guard Station unless configure via DX_Builder

⑤→①④

Surveillance from Guard Station to Door Station
Enter 002001 or 063001 touch "Surveillance" icon to check.

②③→④

Surveillance from Monitor to Door Station
Select "DS1" or "DS4" in the monitoring list to check (this function isn't fully implemented).

Calling or surveillance from DPM-D246-IP by input codes as above

1. Touch the "Input Mode" icon.

2. Enter call codes as above

3. Touch icon on the panel

6. State check and Data diagnostic

Indicators of DPA-D2-IPG

Indicators on the DPA-D2-IPG have a simple and clear meaning for IPG's state

State LED	Power	In-Use	Net	Video
OFF	Outage	Idle	Off Line	VD_Idle
ON	Powered	Talking	On Line	Server
Fast Flashing	Device Error	Out-Call Caller	-	VD C&S
Normal Flashing	Kernel Booting	In-Call Callee	-	Video Client
Short irregular Flashing	App Booting	Call Busy	-	
Long Irregular Flashing	FW Update	-	-	

Buttons of DPA-D2-IPG

To have a quick state check via button, just press once on the buttons, and below information you can check:

Press Button	Check	Call	DT-CHK	IP-CHK
Once	TIP/RING	Enforce Call	DT device check	Network check

TIP/Ring

This is a locate function working cooperatively with PC software DX-Builder.

By pressing CHECK button, the DPA-D2-IPG will send a signal to DX-Builder to indicate which the DPA-D2-IPG is and show all the information about it. Also from the DX-Builder, installer can ring a DPA-D2-IPG to check where it is, the DPA-D2-IPG will response by indicator flashing.

Enforce Call

By press the CALL button, the DPA-D2-IPG will force to launch a call from door station (default DS_ID=00) to the Guard Station (default IP_NODE_ID=201). Because all the involved devices are with default configurations, this function mostly is used to check connection of system during project installation.

Online check for 2-Wire system device

DPA-D2-IPG will check online with door stations (DS_ID=00, DS_ID=01) and monitors (IM_ADD=00, IM_ADD=01) which connected in this system automatically after pressing the DT-CHK button. The 4 LEDs on DPA-D2-IPG are corresponding to the 4 checked devices. The LED will light on for 3 seconds if the device is online, otherwise it is offline.

Online check for IP network devices

DPA-D2-IPG will check online with IP network devices with IP_NODE_ID=1, 2, 201& 202 which connected in this system automatically after pressing the IP-CHK button. The 4 LEDs on DPA-D2-IPG are corresponding to the 4 checked devices. The LED will light on for 3 seconds if the device is online, otherwise it is offline.
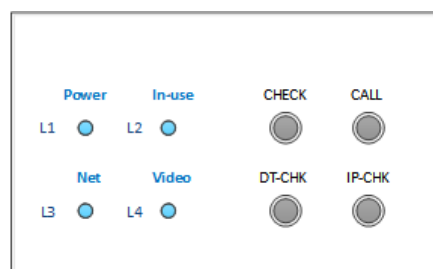
LAN Network inspection

On the first time to go into the Debug Mode the system will show basic information on the screen about the IPG which the DPC-D218ID-S connected with.

First: IP_Node + IP_address + State of DPA-D2-IPG connected with.

Second: Hardware version + Firmware version of DPA-D2-IPG .

Input call codes in Debug Mode

To avoid the erroneous "Doorplate mode" or "Namelist" settings on DPC-D218ID-S in 2-Wire IP Network, debug calling will leave all those settings behind and use a fixed input format:

0 + [IP_Node_ID 3 digits] + [Device_Address 4digits]

To call out debug calling, long press and hold key "0", until the screen display as below, then you could enter the calling codes:

Example inputs:

Common Door Station Call Monitor	Enter: +00010001 + #
Common Door Station Call Guard Station	Enter: +02010001 + #
Common Door Station Call Doro Station*	Enter: +00320001 + #

Only audio intercom, only available in debug calling mode.

If calling under "Debug Mode" (#9008), on the top of the screen will show the communication data, this data helps you diagnose.

7. Advance configure via DX_Builder

PC LAN Network Settings

The DPA-D2-IPG and DPM-D246-IP's default IP address is 192.168.243.XXX. The PC will need to be set in the same subnet in order to connect to the DPA-D2-IPG s and DPM-D246-IPs

a) Open **Control Panel**

- Windows XP® (Classic View) -> **Network Connections** -> Double click **Local Area Connection** to open **Connection Status** window.

- Windows 7/8/10® (Category View) -> **Network and Internet** -> **View network status and tasks** -> Click L**ocal Area Connection** to open the **Local Area Connection** Status window.

b) Click the **Properties** button to open **Local Area Connection Properties** window.

c) Scroll down and left click **Internet Protocol** (TCP/IP) then click **Properties** button to open **Internet Protocol Properties** window.

d) Select the ⊙**Use the following IP address** radio button. Type in the IP address 192.168.243.233 (the last number can be any valid host address except 0~232 and change the subnet mask to 255.255.255.0. Click [OK].

e) Click [OK] in **Connection Properties** window to accept these changes.

Connections

PC connects on the same LAN Switcher, and set the IP address settings as above Here using IP address: **192.168.243.235** And DPA-D2-IPG by DIP switches with 63 and 01 will automatically fit to IP address: **192.168.243.1** and **192.168.243.63.** DPM-D246-IP keep as default will be: **192.168.243.201**
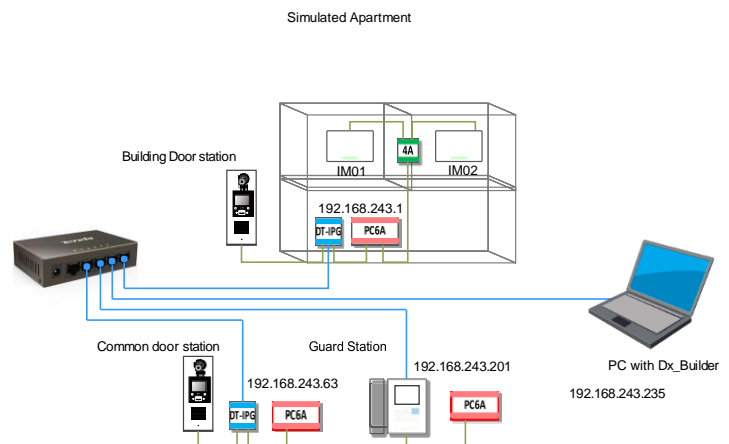

Opening DX_Builder

1) Connect all DPA-D2-IPG s and DPM-D246-IP as above diagram and programing PC to the same network

2) Decompression the "DX_Builder.rar"

3) Open folder "DX_Builder" -> open folder "bin" -> double click on "DX_Bulider.exe"
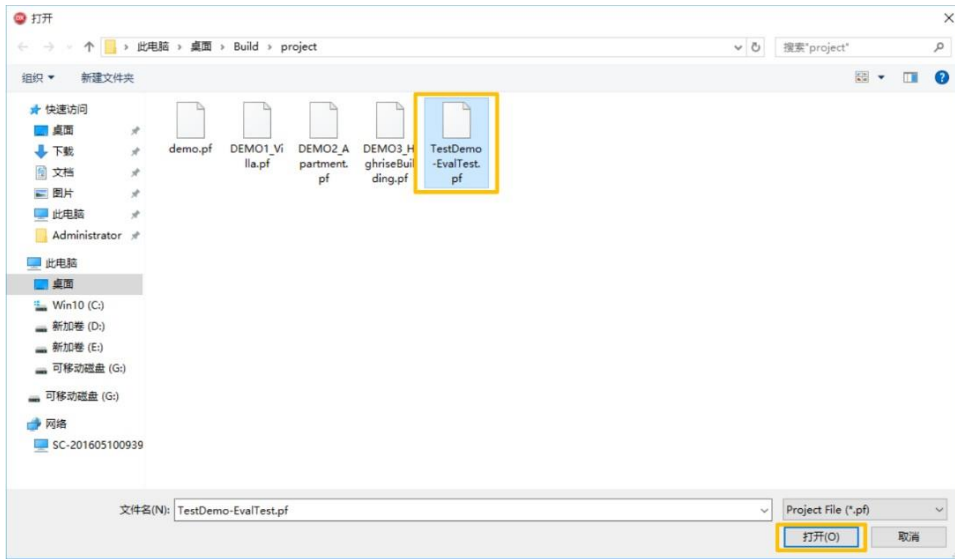
Opening project file

Opening a configured project file "TestDemo-EvalTest.pf" which is customized for the test system, and test it. Below steps helps you to download this project files to IP devices and test.

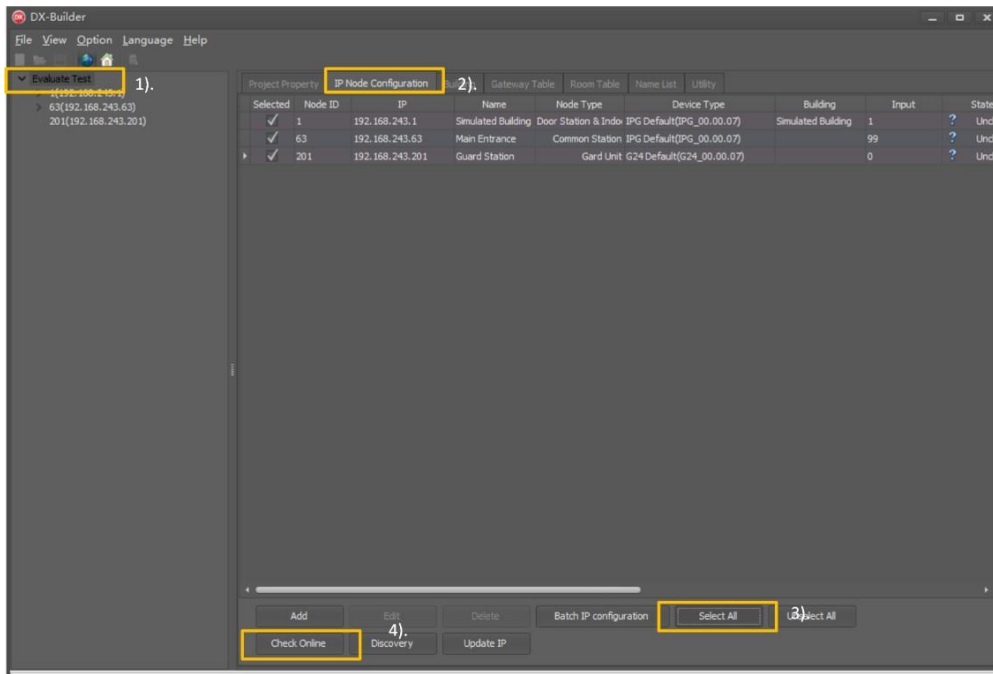**1.** Click "File" -> "Open" to open the project
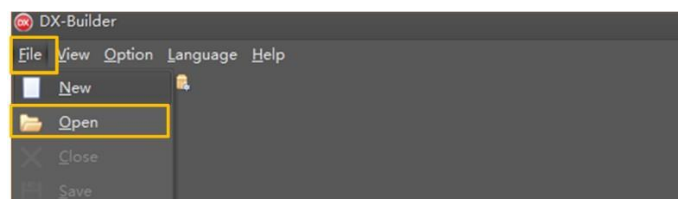
2. With the window popped up, select "TestDemo-EvalTest.pf" file and click "Open"

Online checking and Download

1. Once the project file be loaded and the screen will show as below, first scan all IP devices to check those devices online or not.

1) Click   ∨ Evaluate Test   to select main title.

2) Click   IP Node Configuration   on the "Setting Window".

3) Click   Select All   to select all IP devices

4) Click   Check Online   to scan all selected IP devices, check if those devices online or not

2. All selected devices will be scanned, "VOnline" if device is connected.
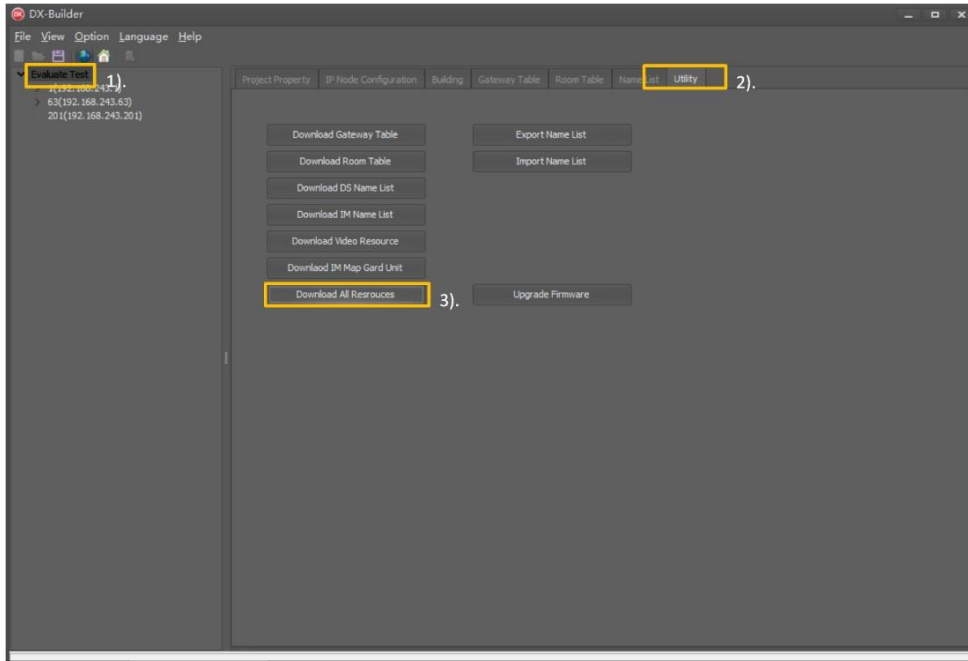
Configurations download for IP Devices

To activate configuration for DPA-D2-IPG and DPM-D246-IP, you need to download all configured files to those devices.
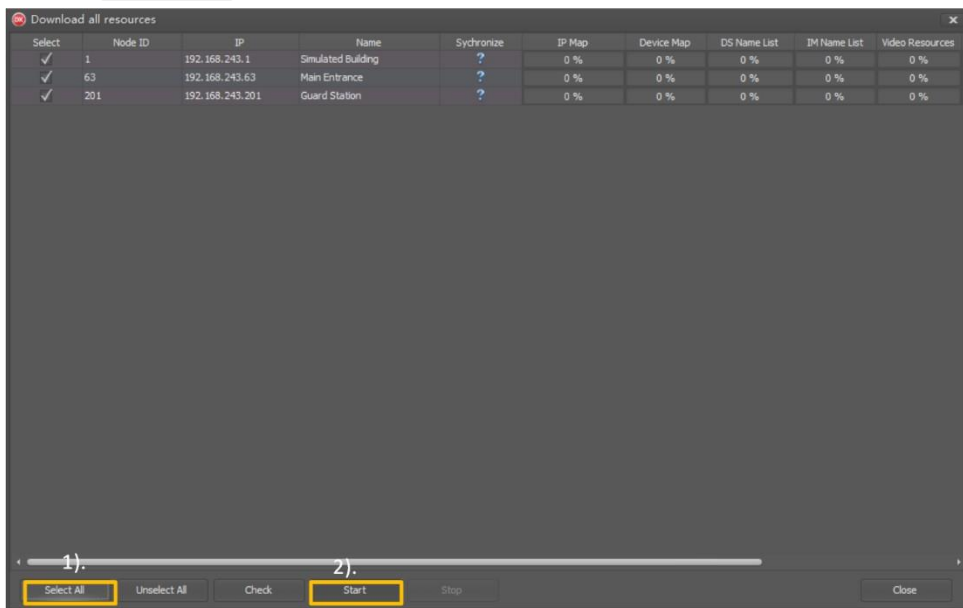
1. Prepare for the download procedure

    1) Click ⌄ Evaluate Test to select main title.

    2) Click Utility on the "Setting window"

    3) Click Download All Resrouces to get ready the download procedure

2. With the window popped up after step1, please do a

    1) Click Select All to select all IP devices need to configured

    2) Click Start to start download configure files to selected IP devices

3. All progress bars go to 100% the download procedure is finish.

Select	Node ID	IP	Name	Sychronize	IP Map	Device Map
✓	1	192.168.243.1	Simulated Building	✓	100 %	100 %
✓	63	192.168.243.63	Main Entrance	✓	100 %	100 %
✓	201	192.168.243.201	Guard Station	✓	100 %	100 %

8. Function test with configuration

Any following calling/surveillance function could be tested on the system you just set

① → ② ③

Call from Building Door Station to Monitor

By Input: Enter 101 or 102 + # to call.

By Namelist: Touch "Bell" icon and select name to call

By Device Address: Enter 001001 or 001002 + # to call

④ → ② ③

Call from Common Door Station to Monitor

By Input: Enter 1101 or 1102 + # to call.

By Namelist: Touch "Bell" icon and select name to call

By Device Address: Enter 001001 or 001002 + # to call

⑤ → ② ③

Call from Guard Station to Monitor

By Input: Enter 1101 or 1102 + # to call.

By Namelist: In the "Intercom" select name to call

By Device Address: Enter 001001 or 001002 + # to call

⑤ → ① ④

Surveillance from Guard Station to Door Station

By Input:

Enter 133 or 001001 then touch "surveillance" icon to check Gate

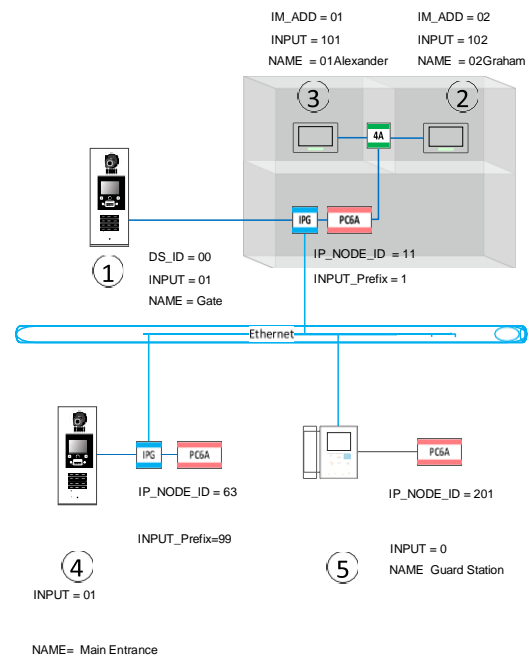Enter 9901 or 063001then touch on "surveillance" icon to check Main Entrance

By List:

Select "Gate" or "Main Entrance" to monitoring

② ③ → ④

Surveillance from Monitor to Door Station

Select "DS1" or "DS4" in the monitoring list to check.

By Device Address, this kind of calling is just a backup option, most of time after configure via DX_Builder, calling by input is recommended.

IM_ADD = 01   IM_ADD = 02
INPUT = 101   INPUT = 102
NAME = 01Alexander   NAME = 02Graham

③   ②

4A

IPG   PC6A

DS_ID = 00   IP_NODE_ID = 11
① INPUT = 01   INPUT_Prefix = 1
NAME = Gate

Ethernet

IPG   PC6A   PC6A

IP_NODE_ID = 63   IP_NODE_ID = 201

INPUT_Prefix=99   INPUT = 0
④   ⑤ NAME Guard Station
INPUT = 01

NAME= Main Entrance

① ④ → ⑤

Call from Door Station to Guard Station

By Input: Enter 0 + # to call.

By Namelist: In the "Intercom" select name to call

By Device Address: Enter 201000+ # to call

② ③ → ⑤

Call from Monitor to Guard Station

Select the "Call Guard Unit" in the intercom function to call.

Appendix1: Firmware Update for DPC-D218ID-S

If your Evaluate Kit containing a SD card, and which you could use directly for the firmware update. If not, you need to prepare a SD card. (Best with storage no more than 8Gbits), and do as follow steps:

1. Copy the firmware file "DPC-D218ID-S.bin" to the root directory of SD card
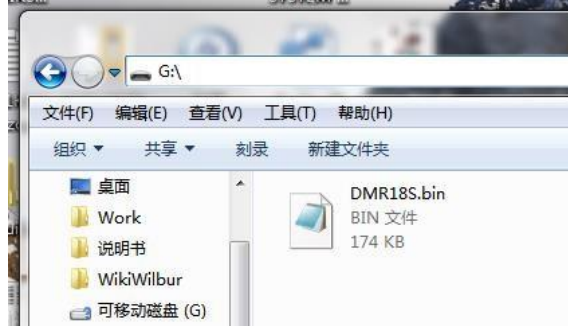
2. Enter # + 8014 + admin code (6666666 by default) when DPC-D218ID-S is standby, the screen will shows as below:

3. Enter key "1" to get firmware update ready, then click in the SD card:

4. After firmware updated, initialize the DPC-D218ID-S is a must, enter # + 8013 + 85548008 in the standby mode, and input YYYY/MM/DD for the initialize date. ex. 20170429.

Appendix2: Difference when using DPC-D250 as building door station

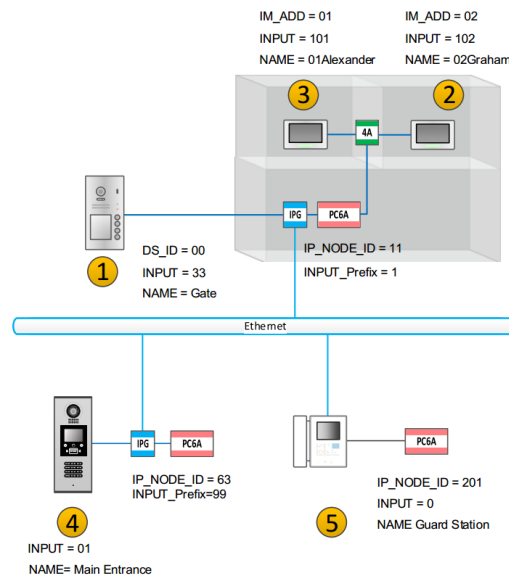### Using DPC-D250/S4 as Building door station

Without configure via DX-Builder before testing, DPC-D250/DPC-D221/DMR11S as building door station won't able to call Guard Station

While with configuration, the same file "TestDemo-EvalTest.pf" downloaded, DPC-D250 / DPC-D221/DMR11S to call Guard station as below

Call from Door Station to Guard Station

Push the 4th pushbutton to call guard station

Using DT601/602 as Building door station, set the address IM_ADD = 16, 00(32)

In this case for calling pushbutton all be use for monitors, is not able to call Guard Station