

## Appendix H: Connect to a 2N Door Station

A 2N door station may be integrated with the Crestron Pyng system and controlled from a supported Crestron touch screen (TSW-560, TSW-760, TSW-1060, or TSW-560P).

For more information on configuring the touch screen for 2N door station support, refer to the TSW-560/TSW-760/TSW-1060 Supplemental Guide (Doc. 7927) at [www.crestron.com/manuals](http://www.crestron.com/manuals).

Crestron Pyng supports a connection to the following 2N door station models:

- 2N IP Audio Kit
- 2N IP Audio Kit Lite
- 2N IP Base
- 2N IP Force
- 2N IP Safety
- 2N IP Solo
- 2N IP Uni
- 2N IP Vario
- 2N IP Verso
- 2N IP Video Kit

Use the procedures in this appendix to integrate a 2N door station with the Crestron Pyng system.

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**NOTE:** The following procedures assume that the 2N door station has been installed completely and is discoverable on the network. For more information, refer to the 2N device documentation.

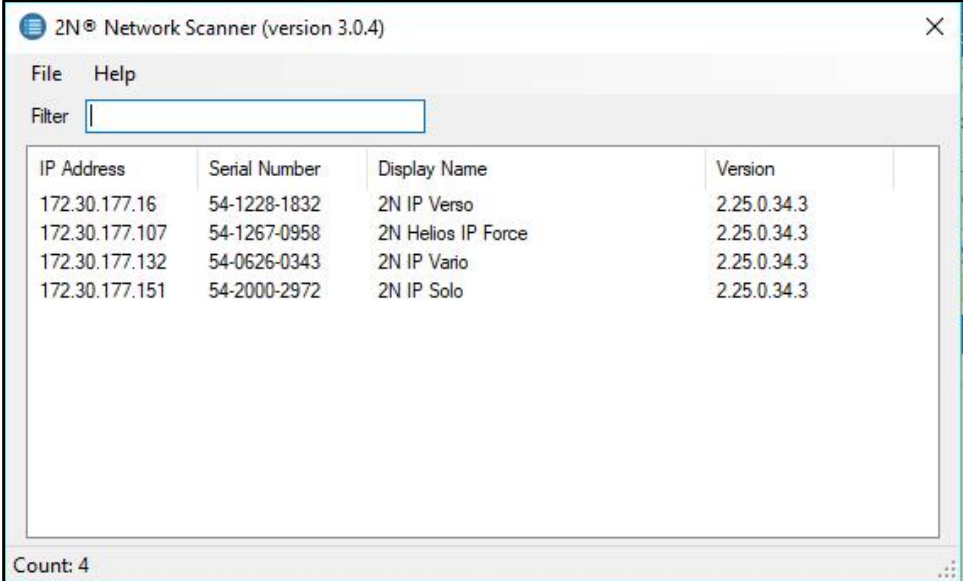
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## Discover the 2N Device

To discover the 2N device on the network:

1. Download and install the 2N Network Scanner application from [https://www.2nusa.com/en\\_US/products/2n-network-scanner](https://www.2nusa.com/en_US/products/2n-network-scanner).
2. Open the application. All discovered 2N door stations on the network are displayed.

### 2N Network Scanner



The screenshot shows the 2N Network Scanner application window (version 3.0.4). It features a menu bar with 'File' and 'Help', a 'Filter' input field, and a table of discovered devices. The table has four columns: IP Address, Serial Number, Display Name, and Version. At the bottom left, it shows 'Count: 4'.

IP Address	Serial Number	Display Name	Version
172.30.177.16	54-1228-1832	2N IP Verso	2.25.0.34.3
172.30.177.107	54-1267-0958	2N Helios IP Force	2.25.0.34.3
172.30.177.132	54-0626-0343	2N IP Vario	2.25.0.34.3
172.30.177.151	54-2000-2972	2N IP Solo	2.25.0.34.3

## Configure 2N Device Settings

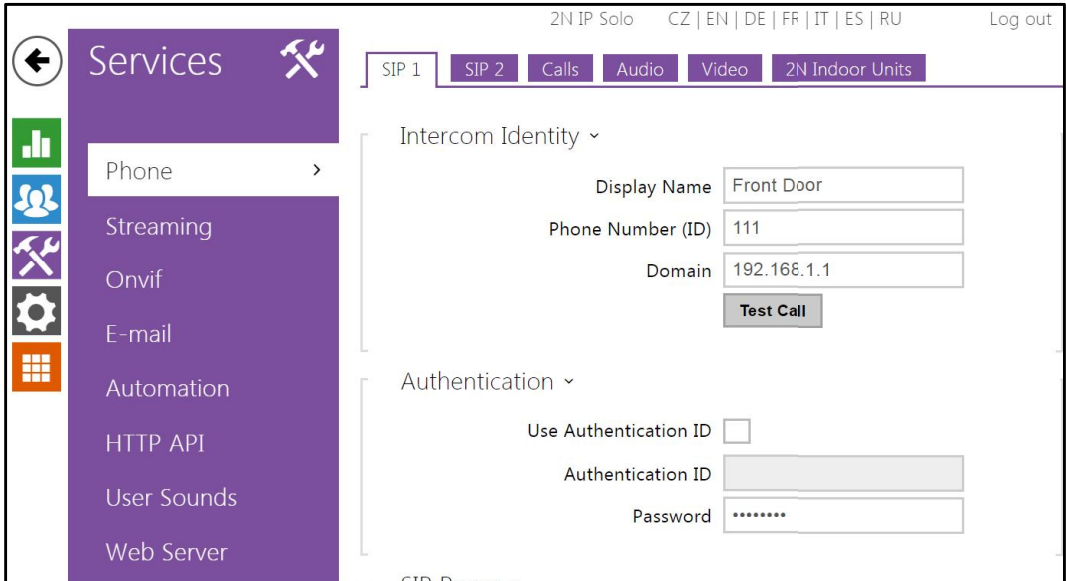
Use the following procedures to configure the 2N device for integration with the Crestron Pyng system.

### Services Settings

1. Launch the web configuration utility for the appropriate 2N device by entering its IP address into a web browser. For more information on the 2N web configuration utility, refer to the 2N device documentation.
2. Click the purple tool icon to display the **Services** menu.
3. Navigate to **Phone > SIP 1**, and enter the following information under **Intercom Identity**:
  - Enter a name for the door station in the **Display Name** text field. This name will be shown on the touch screen to identify the door station when a call is received.
  - If configuring the door station to support Rava® SIP intercom calls, enter the Rava extension for the door station in the **Phone Number (ID)** text field.

**NOTE:** If there are multiple door stations on site, each door station will have a unique extension number.

### 2N Configuration Utility - Phone > SIP 1 Settings



The screenshot shows the 'Services' menu on the left with options: Phone, Streaming, Onvif, E-mail, Automation, HTTP API, User Sounds, and Web Server. The 'Phone' menu is selected, and the 'SIP 1' tab is active. The 'Intercom Identity' section is expanded, showing the following fields:  
Display Name: Front Door  
Phone Number (ID): 111  
Domain: 192.168.1.1  
A 'Test Call' button is located below the Domain field.  
The 'Authentication' section is also visible, showing:  
Use Authentication ID:   
Authentication ID:   
Password:

4. Select the **Calls** tab.
5. Click the check box to display a check mark next to **Enable Crestron Network Discovery** under **Advanced Settings**. The 2N device is now discoverable in Crestron Toolbox.

## 2N Configuration Utility - Phone > Calls Settings

2N IP Solo CZ | EN | DE | FR | IT | ES | RU Log out

SIP 1 SIP 2 Calls Audio Video 2N Indoor Units

Services

Phone >

Streaming

Onvif

E-mail

Automation

HTTP API

User Sounds

Web Server

Audio Test

SNMP

Incoming Calls ▾

Call Answering Mode (SIP1) Always Busy ▾

Call Answering Mode (SIP2) Always Busy ▾

Pick up in 0 [s]

Outgoing Calls ▾

Ring Time Limit 32 [s]

Dial Cycles Limit 3

Advanced Settings ▾

Enable Crestron Network Discovery

Crestron Device Name DoorStation

Crestron Group Names

Enable Video Multicast for Crestron panels

Crestron Multicast Address 239.0.0.1

Crestron Multicast Port 5000

Crestron Multicast TTL 1

### NOTES:

- Video unicast may be used if three or fewer Rava-enabled touch screens will be used with the 2N device. Otherwise, click the checkbox to display a check mark next to **Enable Video Multicast for Crestron panels**, and enter the Crestron multicast settings in the appropriate text fields.
  - If multicast is used and there are multiple 2N door stations on site, specify the unique multicast address for each door station.
  - Multicast may not be supported if it is used with an SIP server.
6. Select the **Video** tab, and enter the following settings:
- Click the check box to display a check mark next to **H.264**.
  - Select **VGA (640x480)** from the **Video Resolution** drop-down menu.
  - Select **30 fps** from the **Video Framerate** drop-down menu.
  - Select **2048 kbps** from the **Video Bitrate** drop-down menu.

## 2N Configuration Utility - Phone > Video Settings

The screenshot shows the 'Video Settings' page in the 2N Configuration Utility. The top navigation bar includes 'SIP 1', 'SIP 2', 'Calls', 'Audio', 'Video', and '2N Indoor Units'. The 'Video' tab is active. The 'Video Codecs' section contains a table with the following data:

CODEC	ENABLED	PRIORITY
H.264	<input checked="" type="checkbox"/>	1 (highest)
H.263+	<input type="checkbox"/>	2
H.263	<input type="checkbox"/>	3

The 'H.264 Video Parameters' section includes the following settings:

- Video Resolution: VGA (640x480)
- Video Framerate: 30 fps
- Video Bitrate: 2048 kbps

## Directory Settings

1. In the web configuration utility, click the blue users icon to display the **Directory** menu.
2. Navigate to **Users**, and click the add user button to create a new user.

## 2N Configuration Utility - Users Settings

The screenshot shows the 'Users Settings' page in the 2N Configuration Utility. The top navigation bar includes '2N IP Solo', 'CZ | EN | DE | FR | IT | ES | RU', and 'Log out'. The 'Directory' tab is active. The 'Users' section contains a table with the following data:

Name	E-mail	Accesses
Button		

The table also includes a search bar, a dropdown menu for '15', and a pagination indicator '1 - 1 (Total 1)'.

**NOTE:** 2N devices also refer to users as "buttons," as this refers to the buttons on the 2N door station that are used to dial specific dwellings or ring groups.

3. Enter "rava:CRESTRON" in the **Phone Number** text field.

## 2N Configuration Utility - User Information

2N IP Solo CZ | EN | DE | FR | IT | ES | RU Log out

Directory

Back to List

User Basic Information

Name Button

E-mail

Virtual Number

User Phone Numbers

Number 1

Phone Number rava:CRESTRON

Time Profile [not used]

2N® IP Eye Address

Group call to next number

**NOTE:** CRESTRON is the default ring groups for all shipping TSW-x60 touch screens. To use a different group name, issue the `SIPPAGEGROUP [GROUPNAME]` command to the touch screen using the Text Console tool in Crestron Toolbox, where `[GROUPNAME]` is the desired group name (all capital letters with no spaces). Then, enter "rava:[GROUPNAME]" in the **Phone Number** text field.

For example, if a `SIPPAGEGROUP FIRSTFLOORGROUP` command was issued to the touch screen, enter "rava:FIRSTFLOORGROUP" in the **Phone Number** text field.

## Hardware Settings

1. In the web configuration utility, click the gray gear icon to display the **Hardware** menu.
2. Navigate to **Buttons**.
3. Add the button (user) created in the previous procedure to the **Main Unit Buttons** menu by clicking the plus button next to the menu.

## 2N Configuration Utility - Buttons Settings

2N IP Solo CZ | EN | DE | FR | IT | ES | RU Log out

Hardware

Switches

Door

Audio

Camera

Buttons

Basic Settings

Button Function During Call Hang Up

Answer Incoming Call by Button None

Restore Network Settings By Buttons

Quick Dial Buttons

Main Unit Buttons

1 x Button +

## Advanced Configuration

If the 2N door station has been configured to send calls to a mobile device via the 2N Mobile Video app, calls may be sent to both the mobile device and the Crestron Pyng touch screen by configuring two phone numbers for the 2N device.

All 2N Mobile Video app settings must be configured and propagated to the door station before configuring the 2N device for call forwarding. For more information on configuring the mobile app, refer to [www.my2n.com](http://www.my2n.com).

To configure the 2N door station for use with the app and the touch screen:

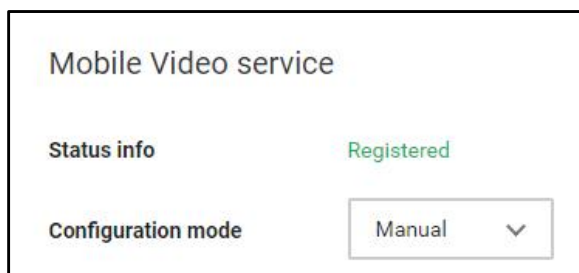
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**NOTE:** The 2N door station must be configured to support a connection to the touch screen(s) prior to attempting this procedure. For more information, refer to "Configure 2N Device Settings" on page 238.

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1. Open the **DEVICE DETAIL** tab for the configured 2N door station in the 2N Mobile Video web configuration interface.
2. Under **Mobile Video service**, select **Manual** from the **Configuration mode** drop-down menu.

### Mobile Video service - Configuration mode



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**NOTE:** If **Configuration mode** is set to automatic, the mobile app may overwrite the existing 2N IP intercom settings, including the touch screen connection.

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3. In the 2N device web configuration utility, click the blue users icon to display the **Directory** menu.
4. Navigate to **Users**, and click the desired user to edit user settings.
5. Enter the following information under **User Phone Numbers**:

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**NOTE:** The phone number for the mobile device is entered automatically in the Phone Number text field for **Number 1** if the mobile device has been configured using the 2N Mobile Video app.

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- For **Number 1**, click the check box to display a check mark next to **Group call to next number**.
- For **Number 2**, enter "rava: [GROUPNAME]" in the **Phone Number** text field, where [GROUPNAME] is the desired ring group name. For more information, refer to "Directory Settings" on page 240.

## 2N Configuration Utility - Users Settings

2N IP Solo CZ | EN | DE | FR | IT | ES | RU Log out

← Back to ListDirectory

Users >

Time Profiles

Holidays

User Basic Information ▾

Name

E-mail

Virtual Number

User Phone Numbers ▾

Number 1

Phone Number

Time Profile  [not used] ▾

2N® IP Eye Address

Group call to next number

Number 2

Phone Number

Time Profile  [not used] ▾

2N® IP Eye Address

Group call to next number