

SYSTEM REQUIREMENTS

- DoorBird IP Video Door Station D10x/D11x/D20x/D21x,A11x-Series or DoorBird IP Upgrade D301A
- AVLinkPro SIP PBX System

ADDITIONAL INFORMATION

The following guide will take you through the steps of setting up a DoorBird IP Video Door Station in connection with a AVLinkPro SIP PBX System.

Please make sure that the AVLinkPro System receives an IP address and is connected to the same local network your DoorBird IP Video Door Station is connected to. Please also make sure that your DoorBird is online, using this service:

<https://www.doorbird.com/checkonline>

The local IP address of your DoorBird is available from the same page.

- DoorBird will communicate with SIP telephones through SIP Calls using the AVLinkPro server*.
- During the call, you can enable the DTMF to Open Door/Trigger Relay

**VOIP Telephone calls will require a SIP trunk to the PSTN "POTS" telephone network.*

AVLinkPro provides a full featured PBX solution for bridged endpoint communications that includes connectivity to digital or analog systems, voicemail, music on hold, call management and IVR. Advanced technology incorporates intercom integration, video over SIP communication as well as triggers and services not found in any other solution. Designed for integration of a variety of SIP devices including DoorBird Door and indoor intercom panels as well as paging output to analog based sound systems. AVLinkPro is the only SIP PBX to fully enable **early media** for DoorBird intercom calls. The AVLinkPro solution can also handle DoorBird relay triggers as well as integration to Crestron, Control 4 and many other third party eco-systems.

FIRMWARE INFORMATION

This manual was tested using the following firmware versions:

DoorBird IP Video Door Station: 000129.

AVLinkPro: All Revisions

This basic introduction will show you how to:

- 1) • Understand SIP Extensions and how they are used in AVLinkPro
- 2) • Setup your DoorBird Doorstation in AVLinkPro
- 3) • Setup and modify groups and group order
- 4) • Setup routing and directives
- 5) • Setup SIP settings for usage in the DoorBird app

UNDERSTANDING SIP EXTENSIONS

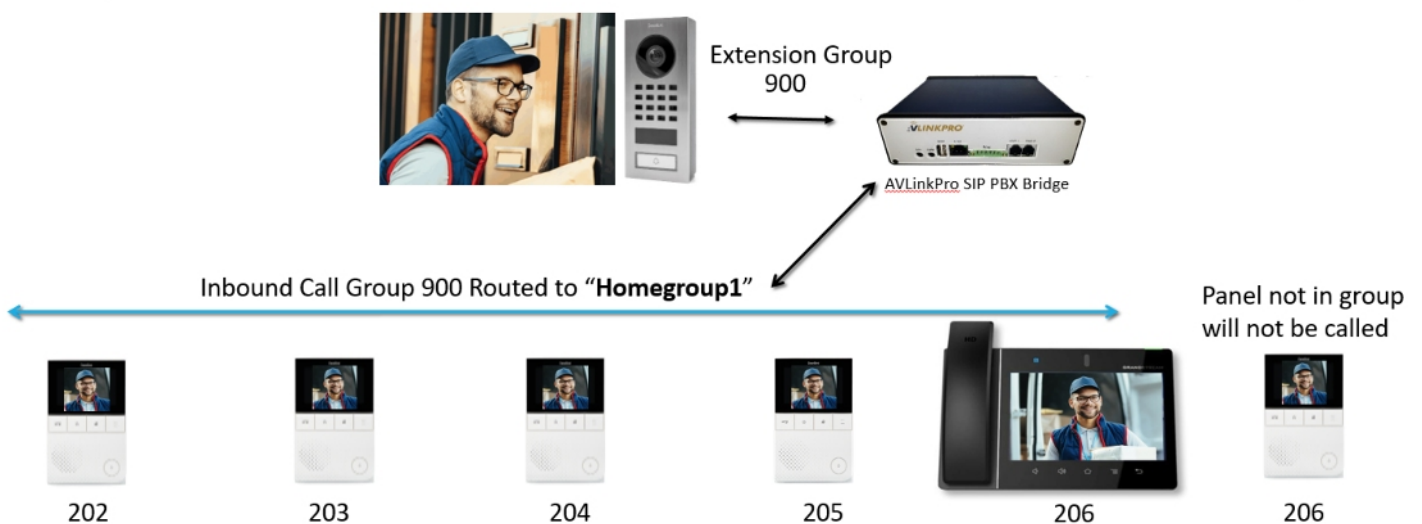
In this section you will create user/s or SIP extensions that utilize a SIP channel for your DoorBird video intercom device/s.

1. When Creating a **Door Station** SIP extension in AVLinkPro, the inbound extension represents that which assigned to an inbound call group, most commonly we use **201, 202 etc...** Other intercom or SIP endpoints inside the network would use individual extensions directly.

Note that Crestron Panel endpoint extensions will be assigned automatically starting at: 101, 102, 103 etc... (Limit Door Stations devices to extensions 201, 202 etc...)

2. The endpoint that dials into the other device like that of a **Door Station** would use an inbound calling group to reach the endpoints within the intercom network. For this reason we would use a call group to include endpoints that are to be included in the inbound call.
3. We would then use a routing instruction to tell the system that a call coming from an endpoint would go to a specific dial group.
4. The last step is to setup in the **DoorBird App**, (Section 5.) this would use 900,901,902etc.. For the inbound call extension.

EXTENSIONS AS PART OF A GROUP



Typical Door Intercom connection calling a designated Dial Group called "Homegroup1"

The screenshot shows the administrative login interface for the AVLinkPro system. It features a 'Sign in' header and a URL 'http://192.168.32.2/PBX'. Below the URL are two input fields: 'Username' and 'Password'. At the bottom right, there are two buttons: 'Sign in' and 'Cancel'.

Start by locating your AVLinkPro system on your network. You will need to use either a fixed IP or a DHCP reserved IP Address. Next using a Chrome, Firefox or Safari web browser navigate to the address:

http://theipaddress/pbx/

Use the administrative login and password to enter the system.

SETUP YOUR DOORBIRD INTERCOM IN AVLINKPRO CREATE A USER

MANAGEMENT CONSOLE

Users

Users **Add User**

Add User

Name **add**

Voicemail Mailboxes

Associate Existing

New Mailbox create new

Mailbox * Full Name

PIN E-Mail Address

Context

SIP Channels

Associate Existing

New SIP Channel based on Template

Navigate to the Users menu. Here you will be adding a User. Follow the Flow by inputting 1. The Name of the endpoint

MANAGEMENT CONSOLE

SIP Channels

Associate Existing

New SIP Channel based on Template create new

Template

Channel Name *

User Name

Caller ID Name

Mailbox

Secret

Caller ID Number

MAC Address

IAX Channels

Associate Existing

New IAX Channel based on Template create new

Template

Channel Name *

User Name Secret

Caller ID Name Caller ID Number

2. Now select the AVLink Softphone template

CREATE A USER

MANAGEMENT CONSOLE

SIP Channels

Associate Existing: select

New SIP Channel based on Template

Template: AVLinkPro Saltphone

Channel Name *

User Name Secret

Caller ID Name Caller ID Number

Mailbox MAC Address

IAX Channels

Associate Existing: select

New IAX Channel based on Template

Template: Default IAX

Channel Name *

create new

3. Now name the caller ID the same as the Name
4. Make the **Channel Name, User Name** and **Secret** all the same (Use **201** if this is the first DoorBird device. **202...** if additional DoorBird units are to be installed)*
5. Next Check the create new box
6. Finally Save the User setting

* Note: The AVLinkPro System will automatically use 201,202, 203, 204 etc for DoorStation endpoints

MANAGEMENT CONSOLE

Users

From the Users page you can now see the DoorBird User you created

search for user or ID search

Edit	ID	Name	SIP	IAX	Voicemail
	387	Front Door Intercom	201		
	411	Master Bed Room	102		

Note: Do not confuse the DoorBird 900,901 etc.. Group with the User extension.
Make sure you do not use **900... etc** in this step!

BUILDING PANEL GROUPS

A key feature to be managed with AVLinkPro is to determine what devices in the residence will ring when the door intercom is triggered.

The following steps will be used to establish what intercom extensions will be activated by the inbound call from the door station.

MANAGEMENT CONSOLE

Applications | Conferencing | Queues | Automation Devices

Overview | Speech Input | Speech Output | IVR Setup | Inbound Trigger | No Touch Monitoring

Configuration		
Conference Bridge Profiles		none
Conference User Profiles		none
Conference Menus		none
Call Queues		none
Agents		none

Navigate to the Applications.
Here you will manage the DoorBird connection to other devices within the intercom network

MANAGEMENT CONSOLE

Applications | Conferencing | Queues | **Automation Devices**

Overview | Speech Input | Speech Output | IVR Setup | Inbound Trigger | No Touch Monitoring

Configuration		
Conference Bridge Profiles		none
Conference User Profiles		none
Conference Menus		none
Call Queues		none
Agents		none

Select Automation devices from the TAB menu

BUILDING PANEL GROUPS

MANAGEMENT CONSOLE

Applications | Conferencing | Queues | Automation Devices

Crestron Panel Setup | Crestron Home | Crestron Home Dial Groups | Crestron Home Routing | Crestron Home Templates

SSH Info:
 Username: admin
 Password: admin1
 Save

Verify the connected devices: This will include your Door station intercom/s and connected Crestron panels

Active Devices: Add Crestron Panel

#	Panel Name	Extension	IP	Mac	Device	Status	Action
1	Master Bed Room	102	192.168.1.73	00:10:77:80:80:80	TS-770-001077	Configured!	Delete
2	Front Door Intercom	201	192.168.1.58	1c.ca.e3.10.00.00	DoorBird/000130 (192.168.1.58, BUILD 16227132, DoorBird D101)	Configured!	Delete

Contact Status:

#	Contact	Hash	Status	RTT(ms)
1	102/sip:102@192.168.1.73-5060;ob	1497	Normal	nan
2	201/sip:201@192.168.1.58-5060;ob	1497	Normal	nan

MANAGEMENT CONSOLE

Applications | Conferencing | Queues | Automation Devices

Crestron Panel Setup | Crestron Home | Crestron Home Dial Groups | Crestron Home Routing | Crestron Home Templates

Dial Groups: Create

Show 10 entries

#	Group Name	Group Type	Extensions	Actions
1	Homegroup1	Dial	679, 204, 298	<input checked="" type="checkbox"/> <input type="checkbox"/>
2	Page Whole House	Page	201, 192, 99	<input checked="" type="checkbox"/> <input type="checkbox"/>

Showing 1 to 2 of 2 entries Previous 1 Next

Navigate to the Crestron Home Dial Groups.

BUILDING PANEL GROUPS

#	Group Name	Group Type	Extensions	Actions
1	Homegroup1	Dial	204 ☑	
2	Page Whole House	Page	101, 121, 100, 901 ☑	

Showing 1 to 2 of 2 entries

Previous 1 Next

Click **Create** and create a Group Name

1. Then Select **Dial**
2. Hit **Submit** to save this setting

CALL ROUTING

By routing the call, we can now determine what the call actions will be and Associate that action to a specific Dial group of extensions.

The following steps will be used to establish what actions will take place when a button or trigger is enabled.

This can include:

- Ringing a Dial Group
- Calling out to a device, like a door station
- Making a virtual trigger to open a relay or play a sound or tone
- Trigger the features of an API in another network device

#	Extension	Template	Configuration	Actions
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Navigate to the **Crestron Home Routing**

Here you will utilize pre-scripted templates found in the **Crestron Home Templates** to Activate specific features in end point devices.

CALL ROUTING

LINKPRO MANAGEMENT CONSOLE

Applications | Conferencing | Queues | Automation Devices

Crestron Panel Setup | Crestron Home | Crestron Home Dial Groups | **Crestron Home Routing** | Crestron Home Templates

Crestron Home Routing: Close

Extension: 900

Template: **Doorbird**

Show 10 entries

Search:

Actions

Click **Create and select the **Doorbird** option this will associate a pre-scripted **DoorBird** call template to establish the call action to any **Dial Groups** you have created. Click **Submit** to save the setting**

LINKPRO MANAGEMENT CONSOLE

Applications | Conferencing | Queues | **Automation Devices**

Crestron Panel Setup | Crestron Home | Crestron Home Dial Groups | **Crestron Home Routing** | Crestron Home Templates

Crestron Home Routing: Create

Show 10 entries

Search:

#	Extension	Template	Configuration	Actions
1	900	Doorbird	900,1,Answer 900,2,NoOp() 900,3,Wait(3) 900,4,Dial(\$[Homegroup1],30,T1)	

Showing 1 to 1 entries

Previous Next

AVLINKPRO FINAL STEP

AVLINKPRO MANAGEMENT CONSOLE

PBX Control

Server: local server @127.0.0.1

Buttons: Update Crestron Controller, Save Configuration Changes, **Sip Reload Configuration Now**, Dialplan / Trigger Reload Configuration Now, System Reload

Buttons: Restart Pbx When Convenient, Restart Pbx Gracefully, Restart Pbx Now

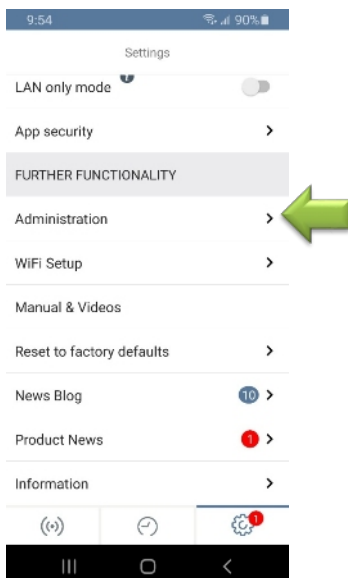
ALWAYS END CONFIGURATION WITH THIS STEP
It will save and provision your settings

DOORBIRD APP SETUP

Log into the DoorBird App and follow the settings

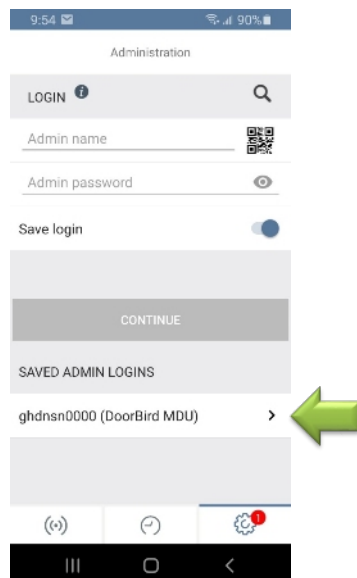
STEP A.

Locate the Administration Link and Select it



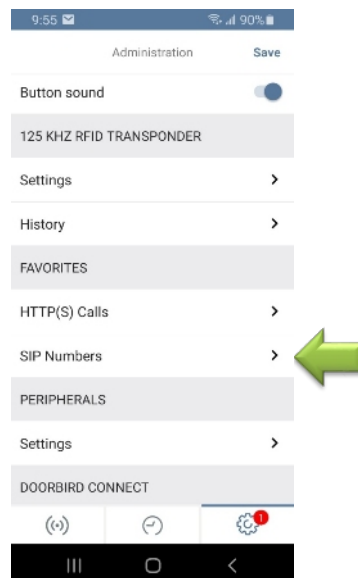
STEP B.

Login to the DoorBird App as the Administrator



STEP C.

On the Administrator Menu locate the SIP Numbers



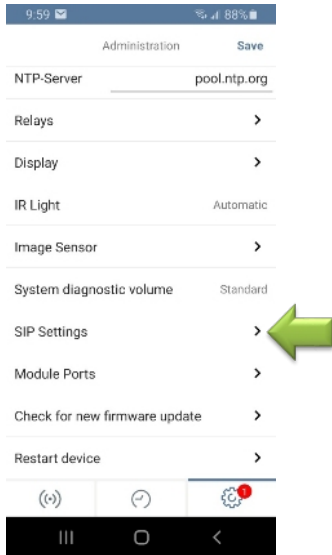
STEP D.

Add a new SIP name for the DoorBird and Extension number of the call group followed by the IP of your AVLinkPro system (save this setting)



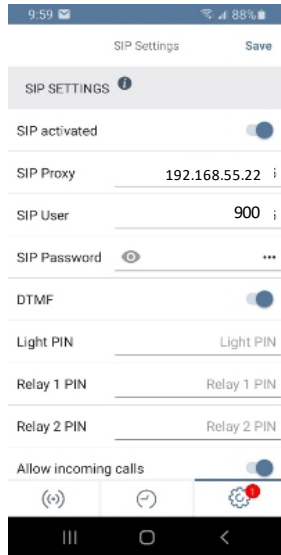
STEP C.

Now exit back to the Administration menu and locate the SIP settings



STEP D.

Set the SIP proxy (IP of your AVLinkPro) and the SIP user and password (Intercom extension of your DoorBird user you setup in the AVLinkPro first) Save this setting here and exit the app.



FINAL STEP E.

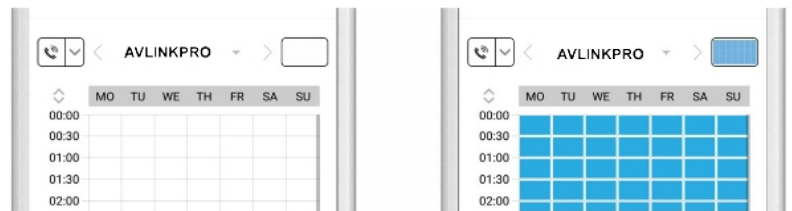
SIP Schedule: a schedule for the DoorBird Intercom doorbell requires a set up.

A) For all devices with a single door chime (e.g. D10x, D20x, D2101V etc.) find the settings in question under "Schedule for doorbell". From this screen, tap the bell symbol in the upper left corner, choose "SIP call" and fill out the schedule per your requirements.

B) For all devices with multiple door chimes (e.g. D2102V, D2103V, etc.) find the settings in question in the administration area under "Key Configuration" from the settings menu. Select the appropriate button and tap "Schedule for actions". From this screen, tap the bell symbol in the upper left corner, choose "SIP call" and fill out the schedule per your requirements.

C) For all devices outfitted with a keypad (e.g. D21DKV) find the settings in question in the administration area under "Keypad" in the settings menu. Select the appropriate key combination and go to "Schedule for actions". From this screen, tap the bell symbol in the upper left corner, choose "SIP call" and fill out the schedule per your requirements.

Hint: by tapping the button in the upper right corner it is possible to fill or clear the entire schedule.



Setting up DoorBird indoor panels or third party SIP endpoints like telephone, go back to page 3. and add them as users. Address these end points by assigning them to groups or calling them directly. by extension

Advanced setup for panel to panel intercom or paging to a sound System may require AVLinkPro setup assistance.

Please reach out to www.avlinkpro.com/support or contact AVLinkPro at: 866-937-2833 option 2