

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.

 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 each the endpoints within the intercom network. For this reason we would use a call group to include end points 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 "Homegroup]"

http://192.1	68.32.2/PBX		
Jsername		 	
Password			
		Sign in	Cancal

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

<u>±Vlinkpro</u>	MANAGEMENT CONSOLE			
🗐 Status Summary Span				
PBX Status	Users			0
😉 РВХ	Users Add User	Navigate to the Users menu.		
▶ Users		Here you will be adding a User.		
Voicemail		Follow the Flow by inputting		
Channels	Add User	1. The Name of the endpoint		
• Dialplan	Name Front Door Intercom			add
Applications				_
C Logs	Voicemail Mailboxes			
CDR Viewer				
Q ^e Configuration	Associate Existing select		~	
PBX Configuration				
PBX Control	New Mailbox			
System Backup				create new 🗆
Streaming FFServer Configuration	Mailbox *	Full Name		
Crestron Panel Configuration	PIN	E-Mail Address		
AV LinkPro™ Setup	Context			
▶ Server Settings	SID Channele			
⑦ Help				
+ Index	Associate Existing Select		~	
▶ Support				
	New SID Channel based on Templete			

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🚍 Status Summary Span	_							
PBX Status	SIP Channels							
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• Users								
 Voicemail 	New SIP Channel be	ased on Template	2. Now select the AVLink Softphone template					
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Dialplan		- VLINETO 407050		create new 🕓				
Applications	Channel Name *	Caco 7940/1961 Caco 7940/1971 Caco 7970/1971						
C Logs	User Name	Counterparts Sortprine Creation Video Panel eth0 Creation Video Panel eth0	Secret					
CDR Viewer	Caller ID Name	Creatron Video Panel en1 Generic SIP NAT Generic SIP Video Phone	Caller ID Number					
✿ Configuration	Mailbox	Grandstream Linksys SPA 921/941/942 Polycom SoundPalet IP Sarties	MAC Address					
PBX Configuration		Polycom VVX Series Sipura ATA						
PBX Control	IAX Channels	Snom SIP Phones Video DoorBell						
System Backup								
Streaming FFServer Configuration	Associate Existing	selact	~					
Crestron Panel Configuration	New IAX Channel be	ased on Template						
AV LinkPro™ Setup	Template	Default IAX ~		create new				
Server Settings				Steate new C				
⑦ Help	Channel Name *							
Index	User Name		Secret					
Support	Caller ID Name		Caller ID Number					



CREATE A USER

IVLINKPRO	MANAGEMENT CONSOLE		
📼 Status Summary Span			
PBX Status	Context		
C PBX		3. Now name the caller ID the same as the Name	_
→ Users	SIP Channels	4. Make the Channel Name, User Name and Secret all the	
Voicemail	Associate Existing select	same (Use 201 If this is the first DoorBird device. 202 If	
▶ Channels		adultional Doorbird units are to be installed)*	
▶ Dialplan	New SIP Channel based on Template	5. Next Check the create new box	
Applications	Template AVI inkPro Softhhone	o. Finally save the oser setting	
C Logs		* Note: The AVLinkPro System will automatically use 201,202, 203, 204 etc for DoorStation endpoints	create new 🗹
CDR Viewer	Channel Name * 201		
Configuration	User Name 201	Secret 201	
PBX Configuration	Caller ID Name Front Door Intercom	Caller ID Number	
PBX Control	Mailbox	MAC Address	
System Backup			
Streaming FFServer Configuration	IAX Channels		
Crestron Panel Configuration	Associate Existing select		
AV LinkPro™ Setup			
▶ Server Settings	New IAX Channel based on Template		
⑦ Help	Template Default IAX	v	create new
▶ Index	Characterization of the second s		
➤ Support	Gnanner Name *		





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.

≟ŶLINKP RO	MANAGEMENT CONSOLE	
🚍 Status Summary Span		
► PBX Status	Applications Conferencing Queues Automation Devices	Ø
🖸 РВХ	Overview Speech Input Speech Output IVR Setup Inbound Trigger No Touch Monitoring	
► Users		
Voicemail		
▶ Channels	Configuration	
▶ Dialplan	Conference Bridge Profiles	none
Applications	Conference User Profiles	none
	Conference Menus	none
C Logs		none
CDR Viewer	Agents	none
¢ Configuration	Navigate to the Applications	
PBX Configuration	Navigate to the Applications.	
PBX Control	Here you will manage the DoorBird con	nection
System Backup	to other devices within the intercom ne	twork
Streaming FFServer Configuration		
Crestron Panel Configuration		
► AV LinkPro [™] Setup		
Server Settings		
⑦ Help		
▶ Index		
▶ Support		

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Voicemail						
▶ Channels	Configuration					
▶ Dialplan	Conference Bridge Profiles					none
Applications	Conference User Profiles					none
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CDR Viewer	Agents					none
©; Configuration						
PBX Configuration						
PBX Control						
System Backup						
 Streaming FFServer Configuration 						
Crestron Panel Configuration						
AV LinkPro™ Setup						
Server Settings						
⑦ Help						
▶ Index						
) Support						

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BUILDING PANEL GROUPS

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🔳 Status Summary Span	_											
▶ PBX Status	Appli	cations Confer	encing	Queues	Automation Dev	ices						0
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▶ Users							•					
Voicemail												
Channels	SSH Info		Verify the	Verify the connected devices:								
▶ Dialplan	Usernar	ne	admin			This will in	nclude you	ur Door statio	n			
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C Logs					Save)		
CDR Viewer	Active De	vices:										
¢\$ Configuration											Ĺ	dd Crestron Panel
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System Backup	2	Front Door Intercon	n 2	D1	192.168.1.58	1c.ca.e3.	DoorBird/000130 (1	7132; DoorBird D101)		Configured!	Delete
Streaming FFServer Configuration			C)			
Crestron Panel Configuration	Contact S	itatus:										
► AV LinkPro [™] Setup	#	Contact						Hash	Status	F	RTT(ms)	
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⑦ Help	2	201/sip:201@192.1	68.1.58:50	060;ob				4	N	n	21	
> Index												
► Support												

<u>IV LINKPRO</u>	MANAGEMENT CONSOLE				
Status Summary Span		Automation Devices			
PBX Status	Applications Conferencing Queue	s Automation Devices			8
C PBX	Crestron Panel Setup Crestron Home	Crestron Home Dial Groups Crestro	on Home Routing Crestron Home Templates		
▶ Users					
Voicemail					
▶ Channels	Dial Groups:	Navigate to the C	restron Home Dial Gro	ups.	Croate
▶ Dialplan					Create
Applications	Show 10 v entries				Search:
E Logs	Grou	p Name	Group Type	Extensions	Actions
CDR Viewer	1 Hom	egroup1	Dial	679, 204, 298 Z	
¢\$ Configuration	2 Page W	hole House	Page	201, 192, 99 Z	
PBX Configuration	Showing 1 to 2 of 2 entries				Previous 1 Next
PBX Control	4				
System Backup					
 Streaming FFServer Configuration 					
Crestron Panel Configuration					
AV LinkPro™ Setup					
▶ Server Settings					
⑦ Help					
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Support					



BUILDING PANEL GROUPS

LINKPRO	MANAGEMENT	CONSOLE			
Status Summary Span					
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PBX					
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Channels	Dial Groups.	Group Name			Clo
Dialplan					
Applications		Group Type			
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onfiguration		1.055			
BX Configuration	Show 10 v entries				Search:
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tem Backup	1	Homegroup1	Dial	204 12	
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restron Panel guration	Showing 1 to 2 of 2 ent	tries			Previous 1 Ne
V LinkPro™ Setup	<				
erver Settings		Click	Create and create a Group	p Name	
lelp		1. 1	Fhen Select Dial		
ıdex		2 4	Hit Submit to save this sott	ing	
Support		2. 1	in Subinit to save tills sett	118	

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

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📼 Status Summary Span													
PBX Status	Applications	Conferencing	Queues Automatic	on Devices						0			
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+ Users	Crestron Panel S	Setup Crestron H	ome Crestron Home Di	al Groups Crestron Ho	me Routing Crest	ron Home Templates							
Voicemail													
Channels													
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CALL ROUTING

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Voicemail									
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▶ Dialplan	Crestron Home Rout	ung:	Extension						Close
Applications			900						
C Logs			Template						
CDR Viewer			Please select one						
© Configuration			Please select one 2N						
PBX Configuration			Send DTMF (Only works Open Door Doorbird API	when on a live call)					
PBX Control	Show 10 v entries		Open Door 2N API Page Out Audio Port					Search:	
System Backup	🕺 🏭 Extension		Ten Multicast Page						Actions
Streaming FFServer Configuration			Generic Video Door Stal Generic Video Door Stal Call into 2N Door Station Call into 2N Door Station	ion with Early Video support ion without Early Video support					
Crestron Panel Configuration			Sound Playback Throug Sound Playback Throug	h API h Sonos (Intel Units Only)					
AV LinkPro™ Setup			Click Cr	eate and sel	ect the Doorb	ird option			
Server Settings			this will	Lassociate a	pre-scripted	DoorBird call	template to		
@ Help			ostabli	the call and	ion to any D		, have created		
▶ Index			establis		ion to any D i	ar Groups you	i nave created		
▶ Support			Click Su	ibmit to save	the setting				

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🚍 Status Summary Span					_				
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🖸 РВХ	Crestron Panel S	etup Crestron Ho	me Crestr	ron Home Dial Groups	Crestron Home Routing	Crestron Home Templates			
► Users					•				
Voicemail									
▶ Channels	Crestron Hon	ne Routing:							
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Applications	Show 10 v en	tries						Search:	
C Logs		tension		Template			Configuration	Actions	
CDR Viewer	1	900		Doorbird			900,1,Answer 900,2,NoOp() 900,3,Wait(3)	宮	
¢ Configuration						900,4	Dial(\${Homegroup1},30,Tt)		
PBX Configuration	Showing 1 to 1	entries						Previous 1	Next
PBX Control									
System Backup									
Streaming FFServer Configuration									
Crestron Panel Configuration									
AV LinkPro™ Setup									
Server Settings									
⑦ Help									
→ Index									
▶ Support									



AVLINKPRO FINAL STEP



DOORBIRD APP SETUP

Log into the DoorBird App and follow the settings



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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 user and password (Intercom extension of yo DoorBird user you setup in the AVLinkPro fin Save this setting here and exit the app.		FINAL STEP E.	
				e SIP Schedule: a schedule for the DoorBird Intercom doorbell requires a set up.	
9:59 🖬 Administration	‰ af 88% m Save	9:59 🖼 SIP Settings	≪ ⊿ 88%∎ A) Save "S) 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 ut the schedule per your requirements.	
Relays	pool.ntp.org	SIP SETTINGS	B)	 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. 	
Display	>	SIP Proxy 192	.168.55.22 i C)		
IR Light Image Sensor	Automatic	SIP User	900 ; "K tap		
System diagnostic volume	Standard	DTMF	۲		
Module Ports	,	Relay 1 PIN	Light PIN Relay 1 PIN	Image: Model to the field of the field o	
Check for new firmware upd	late >	Relay 2 PIN	Relay 2 PIN	00:00 00:30 01:00 0	
(i) (i)	£.9	Allow incoming calls		01:30 01:30 02:00 02:00	
III O	<	III O	<		

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