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## Behnke Series 20, 30 and 50 SIP with IP camera to AMX

### Integration notes

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**System :** AMX with Modero X Touch Screens

**Preamble:** This installation was to add a Behnke Series 50 video IP SIP panel to an AMX home automation system. The AMX system did not have the AMX PABX hardware installed so we utilised a 3rd party software PABX (we used 3CX). The customer's final intention will be to use a hardware PABX solution on the site and they will most likely use the Cisco unified PABX.

The first issue was to link the AMX units to the PABX this required a new module to be uploaded onto the AMX system. There are settings within the AMX panel for the SIP login details although, this was a little confusing at first as in order to see all the settings you had to scroll down the screen; There was nothing on the screen to indicate that there were more settings lower down that menu page.

The next issue was to get the settings correct for the audio, first we changed the TX frames to 2 (you get a horrid noise otherwise). The next thing was to set the audio volumes, as this is a wall monitor and not a handset so the simplex audio (fast switching) had to be used.

The final part was to add the video URL showing images from the Behnke video camera.

After that all worked as expected with great speech quality to and also from the monitors.



### AMX Notes :

- 1) The module must have i in its part number ( i for intercom)
- 2) A File needed from AMX for the communications module

**PABX :** 3CX ( <http://www.3cx.com> )

**IP Camera Stream** <http://192.168.1.180/mjpg/video.mjpg>

### Settings on Behnke

Button 1 calling 800 (ring group) that rang the AMX registered monitors as well as an Iphone with a softphone (3cx).

IP-Doorphone

[← Back](#)  
i-button keypad  
[Call buttons 1-8](#)  
Display / Quick dial targets 00-59  
Unknown caller

#### Call buttons 1-8

	Name	Number	DTMF-Code	Incoming	Outgoing	Relay	Group-ID
01	3cx	800	# - - - - -	Accept	Announcement Off	Off	None
02	amx	106	# - - - - -	Accept	Announcement Off	Off	None
03			- - - - -	Reject	Announcement Off	Off	None
04			- - - - -	Reject	Announcement Off	Off	None
05			- - - - -	Reject	Announcement Off	Off	None
06			- - - - -	Reject	Announcement Off	Off	None
07			- - - - -	Reject	Announcement Off	Off	None
08			- - - - -	Reject	Announcement Off	Off	None
09			- - - - -	Reject	Announcement Off	Off	None
10			- - - - -	Reject	Announcement Off	Off	None
11			- - - - -	Reject	Announcement Off	Off	None
12			- - - - -	Reject	Announcement Off	Off	None
13			- - - - -	Reject	Announcement Off	Off	None
14			- - - - -	Reject	Announcement Off	Off	None
15			- - - - -	Reject	Announcement Off	Off	None



**Telecom Behnke**

IP-Doorphone

[Back](#)  
Network  
**Codec Settings**  
SIP Settings  
Extended SIP Settings  
System  
Help

**Codec settings**  
Codec favored:  
(In listed order)  
Codec 1   
Codec 2   
Codec 3   
Codec 4   
Codec 5   
Codec 6   
Audio Frames per Tx (Default 1)   
iLBC frame size: ☐ 20ms ☒ 30ms  
Speex Rate:

Audio Frames TX set to 2 otherwise horrible noise!

[Back](#)  
**Audio**  
System  
Call Opt.  
Status / Remote

**Audio**  
**Precedence control**  
Precedence switching threshold for "Remote station speaking" [%]    
Precedence switching time for "Remote station speaking" [\* 10ms]   
Remote station speaking: Microphone level [%]    
Remote station speaking: Speaker level [%]    
Remote station listening: Microphone level [%]    
Remote station listening: Speaker level [%]    
**Signalling**  
Level of Ringtone (incoming call) [%]    
Level of signal tones to local speaker [%]    
Level of signal tones to remote station [%]    
**Misc**  
Mute time after DTMF detection [\* 1sec]