



# Milesight-Troubleshooting SIP

Milesight Technology Co.,Ltd.

Camera Version	xx.5.0.104	Update	2015.06.01
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## 1. What is SIP

SIP (Session Initiation Protocol) is a signaling communication protocol, which is widely used for controlling multimedia communication sessions such as voice and video calls over Internet Protocol (IP) network. The protocol defines the message that are sent between peers, which govern establishment, termination and other essential elements of a call.



Figure 1 Communication Live View

Now the SIP machine can support the following call ways(Figure 2).



Figure 2 The Call Ways SIP Supports

## 2. How to Use SIP on Milesight Camera

Up to now, Milesight network cameras with compression H.264&MPEG-4 are able to support SIP, for both primary stream and second stream. So please check the SIP Phone, and make sure that it supports H.264 or MPEG-4.

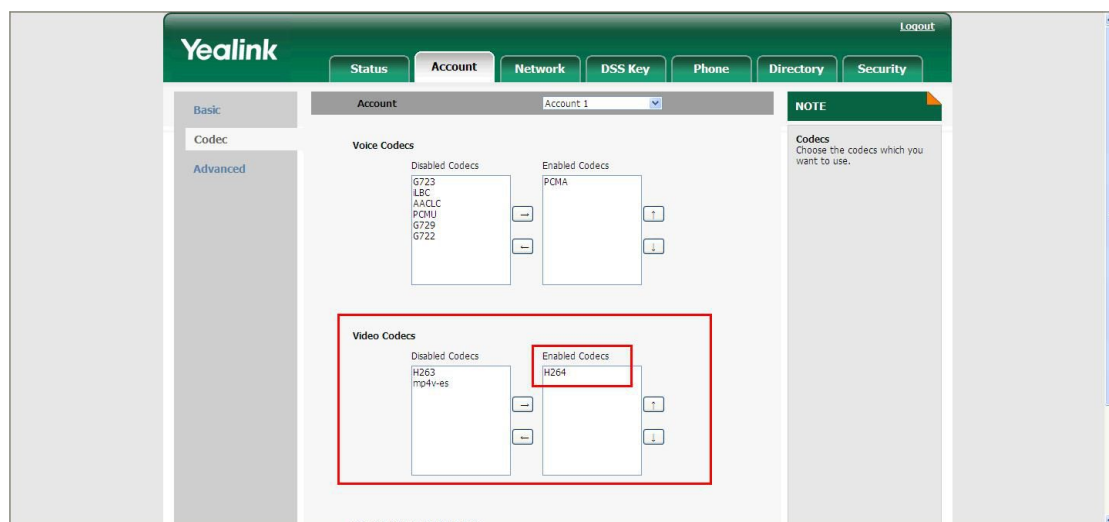


Figure 3 SIP Phone

There are two ways to call a SIP phone:

## 1) Register on a Server

Take MyPBX for example:

**Step1:** Please log in the web, and then create a new account for the camera. Input IP address 192.168.9.99 into the browser till it turns to figure 4 interface, then input the account User Name and Password to log in;

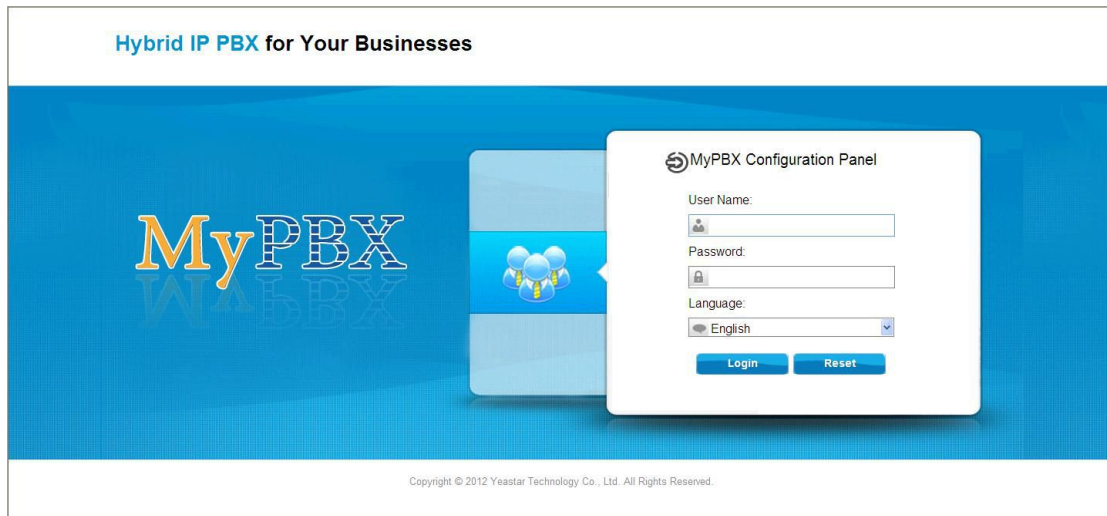


Figure 4 MyPBX

**Step2:** Click on the “PBX” option, choose to add a new account (figure 5);

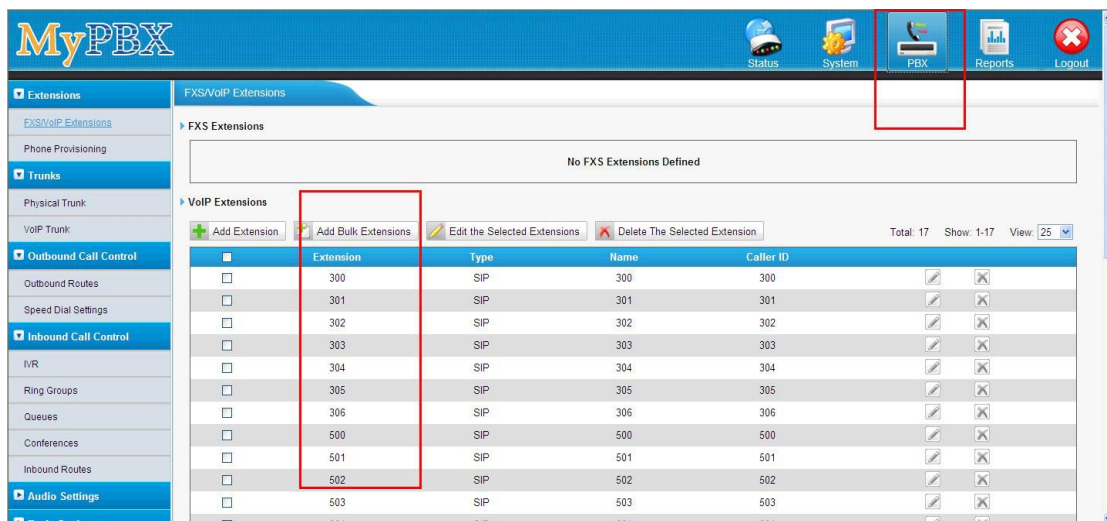


Figure 5 Add a new account

**Step3:** Choose to add a new extension;

Figure 6 SIP Extension

**Step 4:** Click “Status”→“Extension state”, we can see the account registration is successful (Figure 7).

Extension Status				
Free	Busy	Hold	Unavailable	Ringing
300(SIP)	301(SIP)	302(SIP)	303(SIP)	304(SIP)
305(SIP)	306(SIP)	307(SIP)	308(SIP)	309(SIP)
310(SIP)	311(SIP)	500(SIP)	501(SIP)	502(SIP)
503(SIP)	504(SIP)	820(SIP)	821(SIP)	822(SIP)
823(SIP)	824(SIP)	870(SIP)	872(SIP)	873(SIP)
874(SIP)	878(SIP)	879(SIP)	880(SIP)	881(SIP)

Figure 7 check register status

**Step 5:** Enter the information of the account on SIP server. And if the information is right,

the status of SIP will turn to be “Registered”.

**Step 6:** Input your camera’s IP and log in the web page via browser. Go to “Basic Settings”→ “Video”, choose the right stream you want to use for SIP function. Then set the “Profile” to “Base” ( the sip function only works in **Base** mode ).

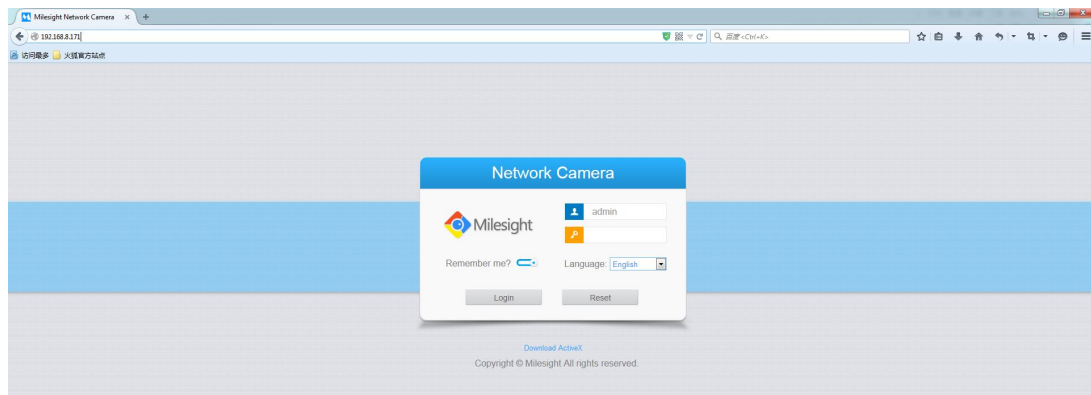


Figure 8 Log in web page

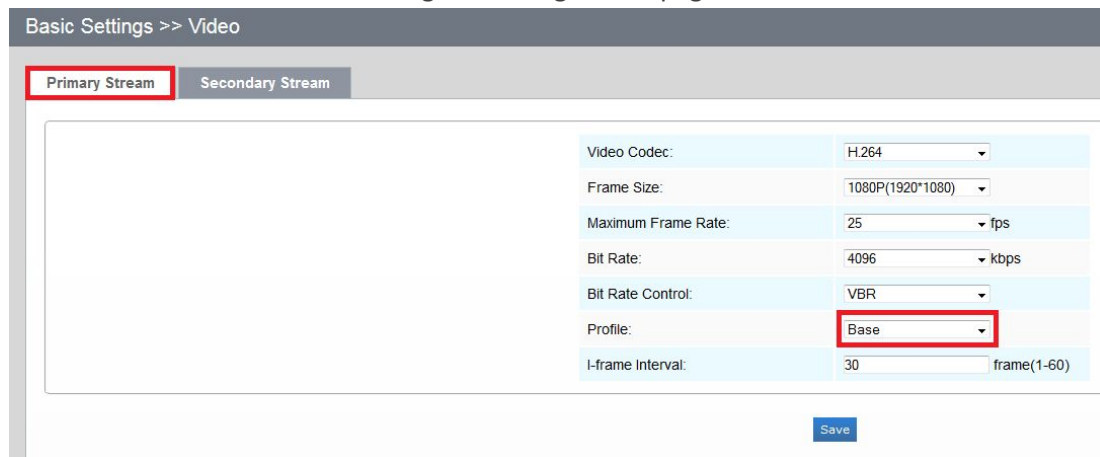


Figure 9 Set Profile Base

**Step 7:** Register an account for SIP devices through SIP server. Fill in the information set in Step 3, click submit to see the blue “Registered” on the top.

SIP Settings	Alarm Phone List	White List
<b>Registered</b>		
Enable:	<input checked="" type="checkbox"/>	
Register Mode:	Enable	
User ID:	871	
User Name:	871	
Password:	••••••••	
Server IP:	192.168.9.99	
Server Port:	5060	
Video Stream:	Primary Stream	
Enable Audio in SIP Call:	<input type="checkbox"/>	
Max Call Duration:	1800 s A settings of 0 disables the timeout.	
Phone Type:	Phone Number	
Phone Number:	871	
<b>Note: SIP supports Direct IP call.</b> <b>SIP only supports H.264 or MPEG4 Video Compression.</b>		

Figure 10 Register Mode

## 2) Call IP Directly

Choose “Disable” mode, then you can call SIP phone via dialing IP directly.

SIP Settings	Alarm Phone List	White List
<b>Unregistered</b>		
Enable:	<input checked="" type="checkbox"/>	
Register Mode:	Disable	
User ID:	871	
User Name:	871	
Password:	••••••••	
Server IP:	192.168.9.99	
Server Port:	5060	
Video Stream:	Primary Stream	
Enable Audio in SIP Call:	<input type="checkbox"/>	
Max Call Duration:	1800 s A settings of 0 disables the timeout.	
Phone Type:	Direct IP Call	
IP Address:	192.168.8.171	
Port:	5060	
<b>Note: SIP supports Direct IP call.</b> <b>SIP only supports H.264 or MPEG4 Video Compression.</b>		

Figure 11 Call IP directly

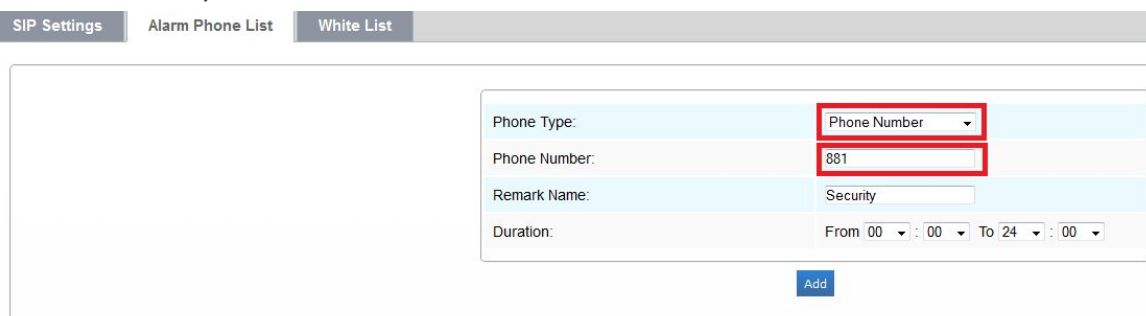
## 3. Telephone Alarm Settings

There are two phone types available to set when alarm is triggered:



## 1) Phone Number

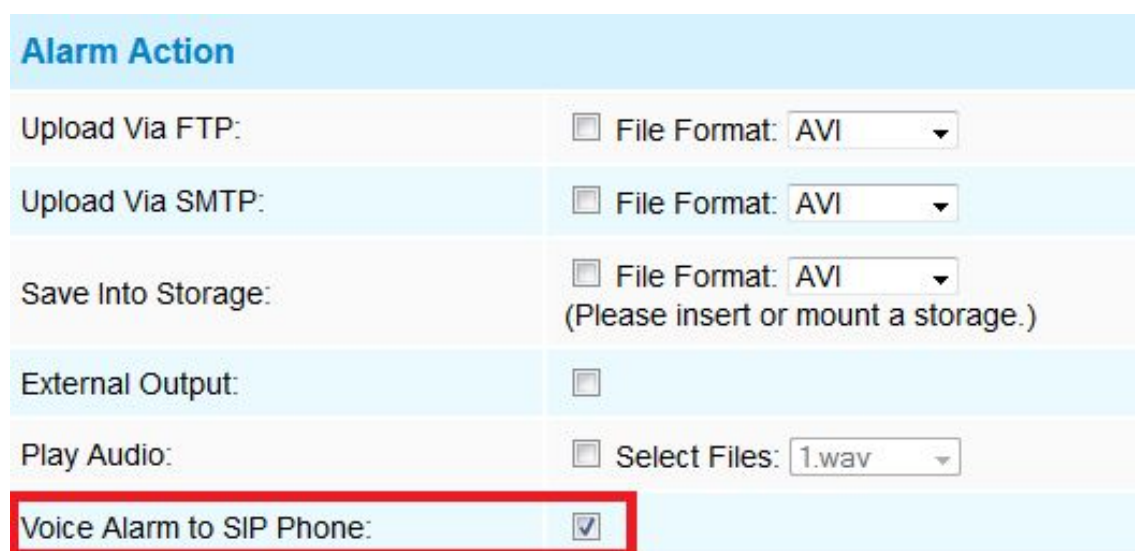
**Step1:** Go to “Advanced Settings”→“SIP”→“Alarm Phone List”, choose “Phone Type”, input the number of SIP phone, and set alarm “Duration”, then click “Add”;



SIP Settings	Alarm Phone List	White List
<div>Phone Type: Phone Number</div> <div>Phone Number: 881</div> <div>Remark Name: Security</div> <div>Duration: From 00:00 To 24:00</div> <div>Add</div>		

Figure 12

**Step2:** Go to “Advanced Settings”→“Alarm”, choose “Voice Alarm to SIP Phone”, and click “Save”;



Alarm Action	
Upload Via FTP:	<input type="checkbox"/> File Format: AVI
Upload Via SMTP:	<input type="checkbox"/> File Format: AVI
Save Into Storage:	<input type="checkbox"/> File Format: AVI (Please insert or mount a storage.)
External Output:	<input type="checkbox"/>
Play Audio:	<input type="checkbox"/> Select Files: 1.wav
Voice Alarm to SIP Phone:	<input checked="" type="checkbox"/>

Figure 13

**Step3:** When the alarm is triggered, the camera will call SIP Phone through dialing the phone number. At the same time, we can see video images on the SIP device ;

## 2) Direct IP Call

**Step1:** “SIP”→ “Alarm Phone List”-> “Phone Type”→ “Direct IP Call” ;



SIP Settings	Alarm Phone List	White List
<div><div>Phone Type: Direct IP Call</div><div>IP Address: 192.168.8.130</div><div>Port: 5060</div><div>Remark Name: Security</div><div>Duration: From 00 : 00 To 24 : 00</div><div>Add</div></div>		

Figure 14

**Step2:** When the alarm is triggered, the camera will call SIP Phone through IP directly. At the same time, we can see video images on the SIP device .

**Note:**

The camera and SIP Phone should be on the same network segment, making sure that they can ping each other first.