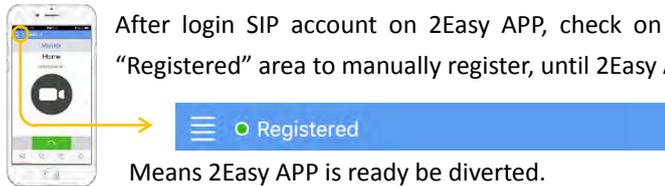


SIP Divert trouble shooting

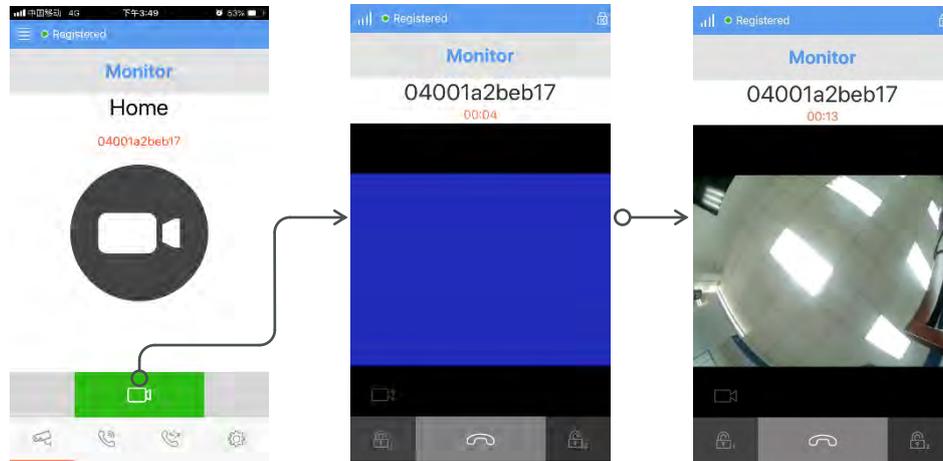
Self-check SIP Divert Issues.

Status Check list:

<p>DX Monitor</p> <p>Check until:</p>  SIP registered	<p>Monitor SIP Status check:</p>  <ul style="list-style-type: none">  Wireless network  Monitor SIP registered  SIP register error <p>When below means DX monitor is ready to Divert, otherwise check rest settings, until you see </p> <p>Wi-Fi connection:</p> <p>Failure to connected to Wi-Fi:</p> <ul style="list-style-type: none"> Switch “ON/OFF” on “Wireless” -> “WLAN” turn off and turn on. Check SSID and Password. (No special character in SSID, 2.4GHz, WPA2-PSK). Disconnect power supply and power up after a few minutes. Disconnect power and re-plug Wi-Fi connector. Connect mobile’s Hotspot <p>Connect to Wi-Fi but not registered:</p> <ul style="list-style-type: none"> On “SIP Config” page tap “Manual Register”, until “Registered!” If still failure, on “SIP Config” page tap “Use Default”, until “Registered!” <p>Advance tips:</p> <ul style="list-style-type: none"> Disable Wi-Fi router’s firewall. Replace Wi-Fi network/router. Replace other SIP server
<p>2Easy APP</p> <p>Check until:</p> 	<p>2Easy APP SIP status check:</p>  <p>After login SIP account on 2Easy APP, check on status bar, or tap on the “Registered” area to manually register, until 2Easy APP display:</p> <p>Means 2Easy APP is ready be diverted.</p> <p>2Easy SIP connection:</p> <p>Registered error:</p> <ul style="list-style-type: none"> Disable “IPV6” in “Settings” -> “Network Settings” On “SIP Config” page tap “Manual Register”, until “Register ok!” If still failure, on “SIP Config” page tap “Use Default”, until “Register ok!” Scan and login account once again <p>Advance Tips:</p> <ul style="list-style-type: none"> Connect to Wi-Fi network and test.

Verify SIP connection

When DX monitor and 2Easy both standby and still can't make it work, dial from 2Easy to Monitor to see if it works:

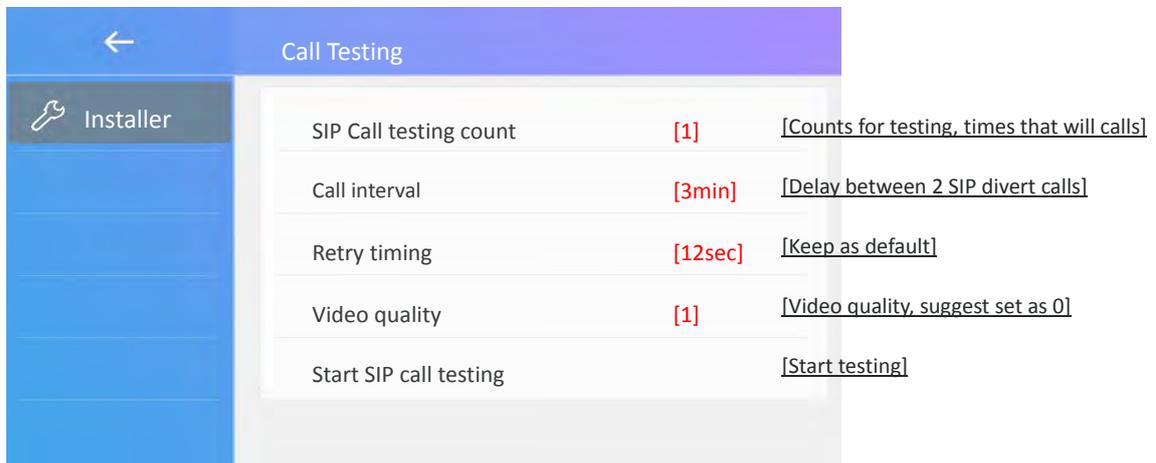


If monitoring works, means SIP both way communication works, now divert should work as normal. Otherwise see next step

Verify SIP Divert

a. Test with SIP tools, auto-test (Unattended Door Station)

SIP tools could test divert function and with an unattended door station. To start auto-test follow by: on DX monitor, "Settings" -> "Wireless" -> "SIP tools" -> "SIP call testing"



During test in state, press "Unlock" to check real time log. Information as below

Text fields	Explain	
Target Ring	Target mobile receives call and ring	If APP don't ring, check mobile network
Target Not found	Target mobile is offline	Check mobile network
Target Answer	Target mobile answer the call	Normal
ReInvite 1	Counts that device try to find mobile	Check monitor's network
Target No answer	Target mobile is not answer the call	Normal
Target Cancel	Target mobile hangs up call after pick	Normal

b. Test by manually press door station call button

Before manually test, make sure monitor has set "Call Scene" in "Divert always" or "Divert is no answer"
Press call button and during DX monitor in divert, tap "View Log" on screen, to check real time log. With above to check network issues.

Still can't make it work, contact for help.

Please help us to collect a call log so we could analyze.

On DX monitor, tap "Settings" -> "Wireless" -> "SIP tools" -> tap twice "Clean Sip call statistics" -> "SIP call testing"
collect at least 10 times call log, and in "SIP tools" -> "Copy to SD card". And send call log to:

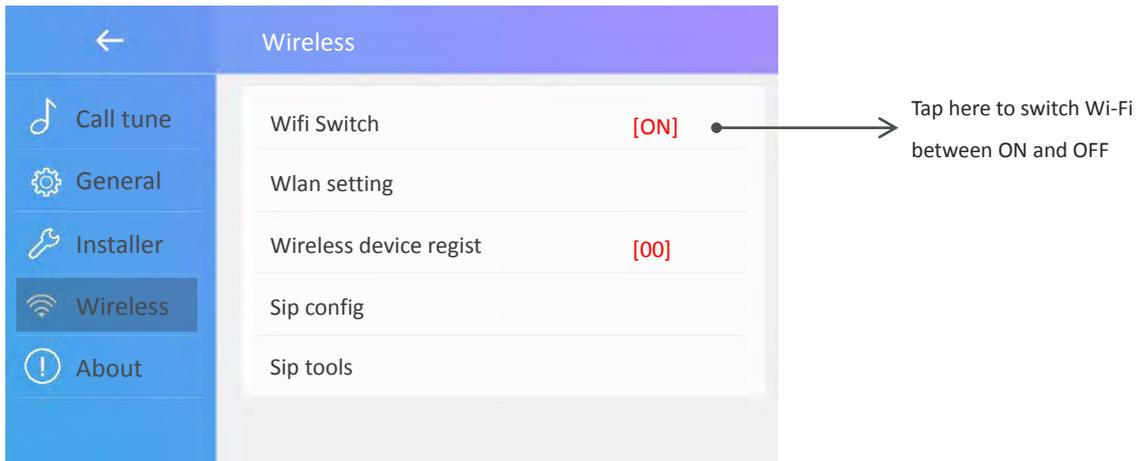
support@v-tec.com.cn or wilbur@v-tec.com.cn or chenghuineng@v-tec.com.cn

More information, troubleshooting list:

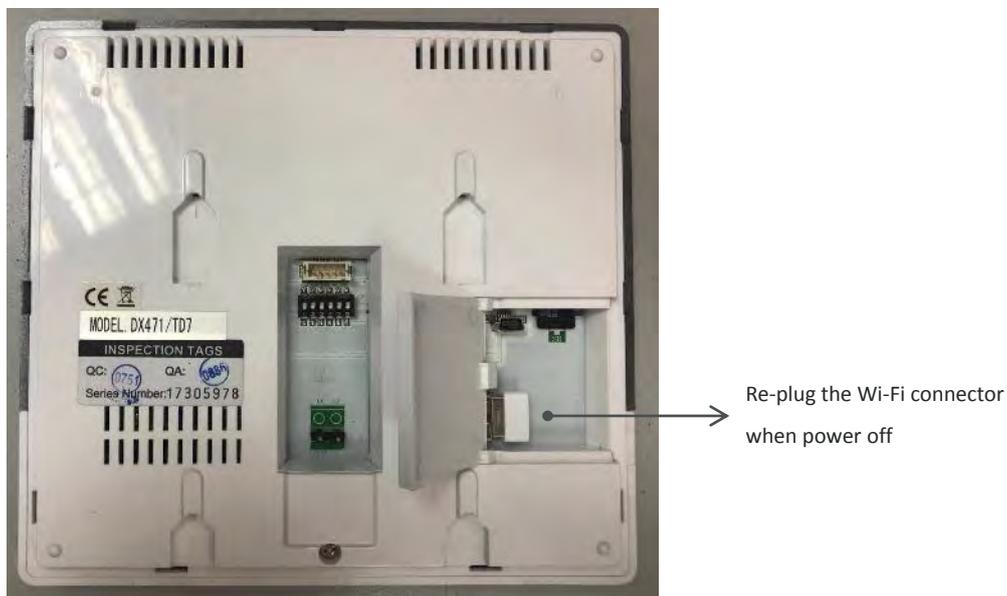
- ✚ [Monitor cannot connect to Wi-Fi](#)
- ✚ [Monitor's account is not online with symbol "!"](#)
- ✚ [I incautiously changed Monitor's SIP account, how to recover it?](#)
- ✚ [Monitor shows with "Diverting" without APP ring, but after few seconds, monitor rings as normally.](#)
- ✚ [2Easy APP always "Not Register" or "Register in progress", with "Unknown error/cannot reach to server"](#)
- ✚ [2Easy APP always "Not Register" with "Unauthorized because missing credential"](#)
- ✚ ["PUSH" doesn't works, can only works when 2Easy works on foreground or background.](#)
- ✚ [No Audio call on Mobile](#)
- ✚ [Voice is too small on Mobile/Door station side.](#)
- ✚ [No video when diverting calls to APP.](#)
- ✚ [Video is slow and lagged.](#)
- ✚ [Cannot unlock via 2Easy APP](#)
- ✚ [Sometime works, sometime not.](#)

1. Failure to Connect DX monitor to Wi-Fi

- 1) DX monitor only support 2.4GHz Wireless network Wi-Fi, 802.11b/g/n. not support 5GHz.
- 2) Wi-Fi network should be encrypted in “WPA2-PSK”
- 3) Connect to network will take around 30s, during monitor in state “Connecting” please do not click into Wi-Fi search list.
- 4) If you are not able to search to any network at Wi-Fi search list, please confirm point 1), if still nothing on the list, try “Settings” -> “Wireless” -> “Wi-Fi switch”, turn it off and then wait for 10s turn it on.



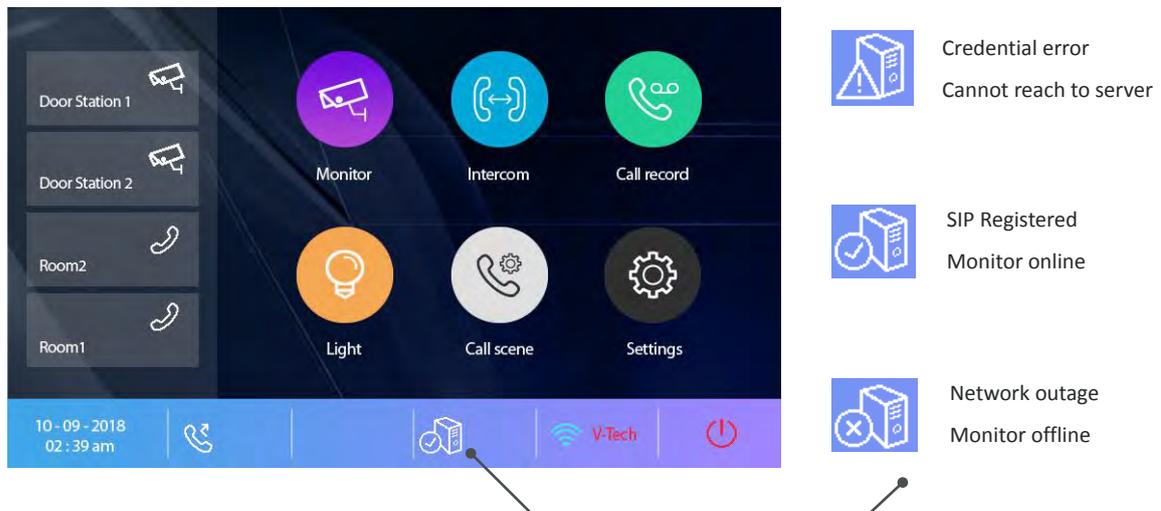
- 5) With below measure could not get wireless work, please check Wi-Fi receiver, and disconnect power supply, on back side, open the hatch, re-plug Wi-Fi receiver as below:



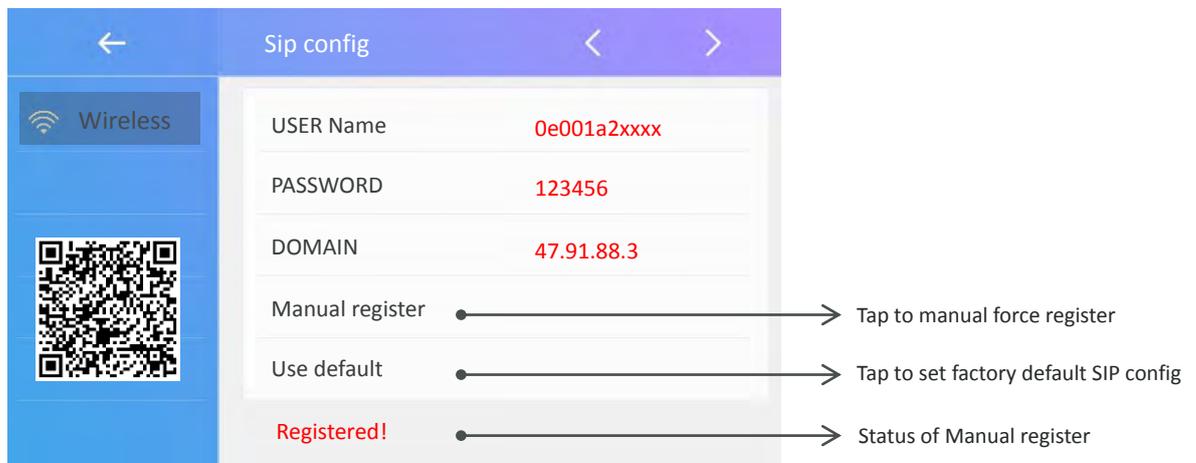
- 6) Always update to latest version

2. DX monitor's SIP account offline.

Check SIP statuses in the main page, SIP status as below:



- 1) If SIP status shows “X” means the wireless network is not working, please connect your DX monitor to Wi-Fi, or refers to “Failure to Connect DX monitor to Wi-Fi”
- 2) If SIP status shows “!” means the account is not register to SIP server. Tap “SIP status” icon to get into “Sip config” page. On the “Sip config”, tap “Manual register”, and wait status shows as “Register ok”. And back to main page, check with status.



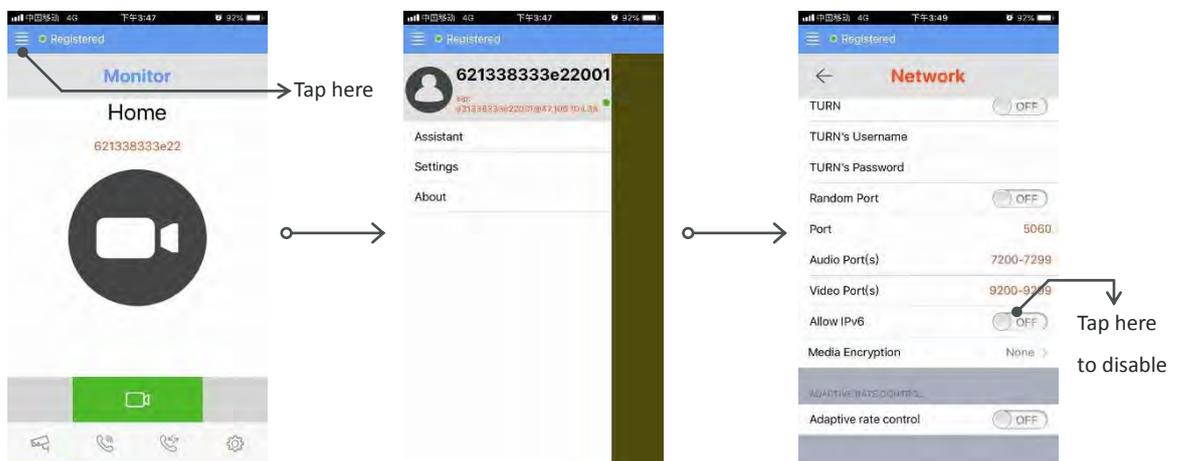
- 3) Default SIP account settings:
If after Step 2) shows “Register error”, tap “Use default” to set SIP conifg to default factory settings, this will cover only settings in this page. And tap “Manual register” again.
- 4) Wireless router settings:
With above setting, but still get status “!”, please check your wireless router setting, please follow by your router’s manual to get into setting page, most of router is in “Security settings”
 - ✓ Make sure SIP is enable, and port as “5060”
 - ✓ Disable “SIP ALG”, or enable “SIP ALG”
 - ✓ Disable “RTSP ALG”, or enable “RTSP ALG”
 - ✓ Disable “Firewall”

3. Divert is disable/failure.

- 1) Check settings or status of DX monitor:
 - ✓ Check “Call scene” make sure is in “Divert, call if no answer” or “Divert call always”. When in “Divert, call if no answer” DX monitor will rings with video and wait 30sec then divert call.
 - ✓ Check status of “SIP account”, only when status is “v”, DX monitor could divert calls to mobile.
- 2) DX monitor shows “Divert page” but after a while “Divert” ends, DX monitor rings with video. That means DX monitor divert calls to mobile but doesn’t reach to mobile, so it changes to local call. Check with below step by step:
 - ✓ Tap “Manual register” on DX monitor’s “SIP Config” page.
 - ✓ Mobile “Registered” successfully with corresponding account.
 - ✓ After “Registered” on 2Easy APP, keep “2Easy” APP runs on foreground and call.

4. Register failure on 2Easy APP

- 1) Check permissions/authority setting on your mobile.
Make sure “2Easy” has fully approved to connect both “GSM” and “Wireless” network.
- 2) Check DX monitor’s SIP status
DX monitor must be connect to Internet and register information to sever first, otherwise 2Easy APP cannot get register.
- 3) Disable “IPV6” on 2Easy APP
Most of internet provide doesn’t support IPV6 feature, please manually disable it with follow steps:
Goes to “menu” page -> “Settings”-> “Network” -> disable “Allow IPV6”, as below shows.



- 4) Network checking:
 - ✓ Make sure your mobile could get internet service.
 - ✓ Check there is no other running VOIP APP, occupying port: 5060, exit all other VOIP APP.
 - ✓ If connect with wireless network, check your router’s setting, [refers to this](#).
 - ✓ Make sure your ISP support with SIP/VOIP service.

5. Push notification does not works.

- 1) Check SIP communication.
To see if 2Easy running on the foreground, whether it could get calls from DX monitor. Make sure the SIP communication is work.
- 2) Check permissions/authorize settings on your mobile
"2Easy" needs to be approved for notification, check with "notification" setup on your mobile.
- 3) Check 2Easy could is able to register.
Scan and login the account, and exit 2Easy APP, tap 2Easy APP to see if 2Easy could quickly change from "Register in progress" to "Registered", and disable "IPV6".
- 4) Disable all 3rd VOIP/SIP softphones.
 - ✓ Exit or delete all other
 - ✓ If connect with multi device, please make sure all device using only "2Easy". And device has exit other VOIP/SIP APP
- 5) Tap "Manual Register" on DX monitor after step 3), Wait at least 1min to call to DX monitor.
- 6) With above steps, still could get chance not getting push notification (10%), because of "APPLE" and "GOOGLE" push server, thereby, we suggest run "SIP tools" to test probability of SIP calls.

6. Voice issue

a. Both no voice at all.

- 1) Make sure Bandwidth is enough
Connect DX monitor to better network, mobile works in 4G GSM network. During talking, disable video service on mobile to see if network could be better. [Or lower video quality.](#)
- 2) Check with your router settings.
Please refers to [router settings](#), especially "SIP ALG" and "RTSP ALG", or try another wireless router.

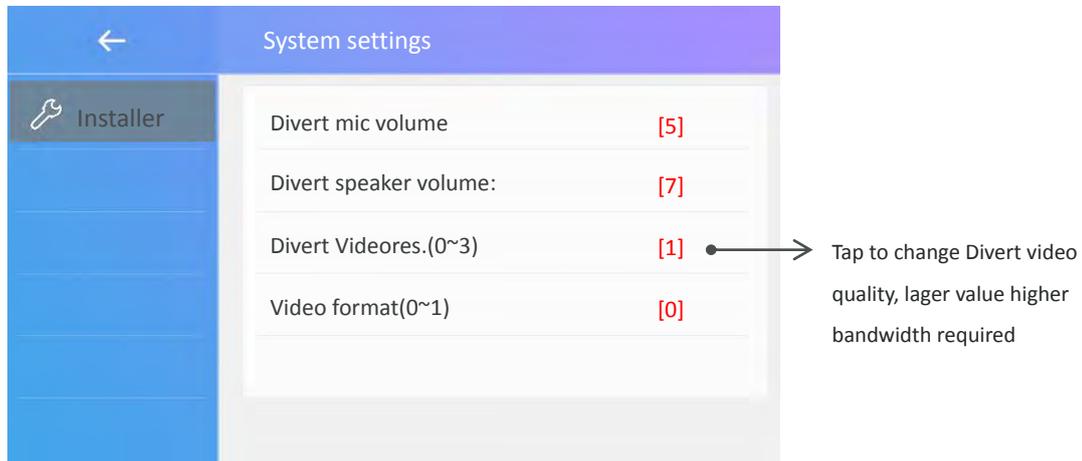
b. Voice is too small or no voice on one side.

- 1) Make sure Bandwidth is enough
Connect DX monitor to better network, mobile works in 4G GSM network. During talking, disable video service on mobile to see if network could be better. [Or lower video quality.](#)
- 2) Test with a far distance
Keeps mobile far away from door station to avoid your voice regard as "echo", and been canceled by DX monitor.
- 3) Setup voice setting on DX monitors.
"Settings" -> "Installer" -> "System settings" -> input password "12345678" -> next page -> "Divert mic volume" or "Divert speaker volume"
Try to setup volume to higher level.
- 4) Try different MIC on iPhone.
Disable "loud speaker" and close to MIC on bottom
Enable "loud speaker" and close to MIC on the TOP
- 5) Check with your router settings.
Please refers to [router settings](#), especially "SIP ALG" and "RTSP ALG", or try another wireless router.

7. Video issue

1) Setup a lower video quality

On DX monitor, tap “Settings” -> “Installer” -> “System settings” -> input password “12345678” -> next page -> “Divert Videores.(0~3)”. From 0~3, 0 means minimum bandwidth required. Please test start from “0”



2) Make sure Bandwidth is enough

Connect DX monitor to better network, mobile works in 4G GSM network. During talking, disable video service on mobile to see if network could be better.

3) Check with your router settings.

Please refers to [router settings](#), especially “SIP ALG” and “RTSP ALG”, or try another wireless router.

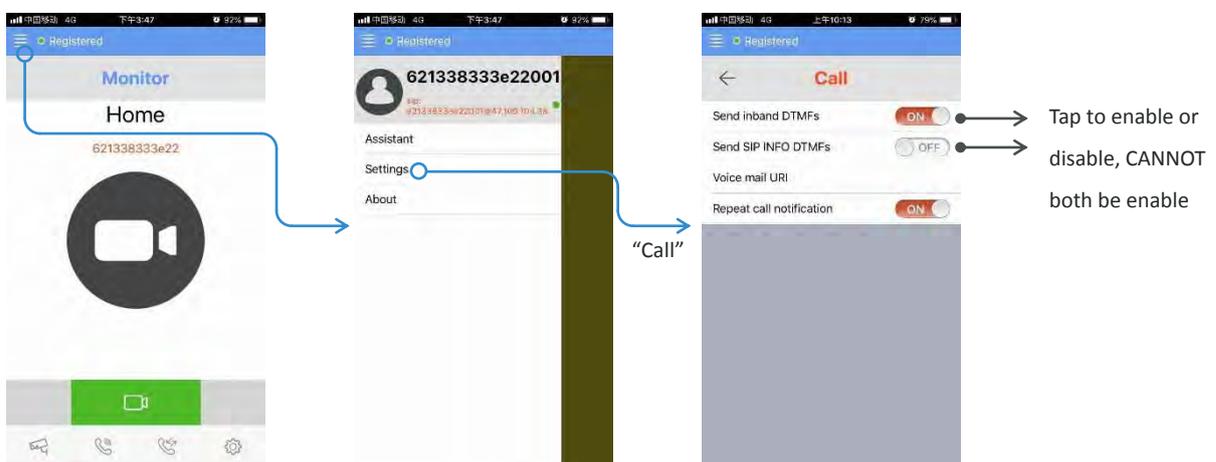
4) Test with “SIP tools”

Run multi times of “SIP Call Testing”, with test results, check with call log:

- ✓ There is many “ReAnswerX”, please change DX monitor network.
- ✓ There is “Video connected”, but no video on APP, please try different Mobile network.

8. Unlock Issue

Check on 2Easy APP with below settings, try “Send inband DTMFs” or “Send SIP INFO DTMFs”, please do not enable/disable them in the same time, and keep at least one enable.



9. Stability issue

Please use “SIP tools” to generate a fully report.

In “SIP tool” could dedicate a statics view with probability of calls, and video calls. DX monitors use Frankfurt (Germany) server by default, probability of calls depend not only on DX monitors/Mobile’s network, but also related to the connection to the server. server phycisal location as below:



After at 10 times of test, check on the list:

Call Statistics		
Wireless	SIP Calls	[31/37] [Calls Divert successfully/Total Calls]
	Call service	[83.8%, 56.8%] [Call success rate/Rate without retry]
	SIP video	[19/25] [Calls with video stream/Total Calls]
	Video service	[76.0%, 68.0%] [Video success rate/Rate without retry]
	SIP server delay	[5.5s, 66ms] [SIP calling response timing/Delay]
In testing, 49 remaining, waiting		[Testing status]

On SIP server delay, you could find out response timing:

Response timing	Service rate
<4.5s	Around 99%
4.6s-5.5s	Around 90%
5.6-7s	Around 70%
>7s	Around 60%