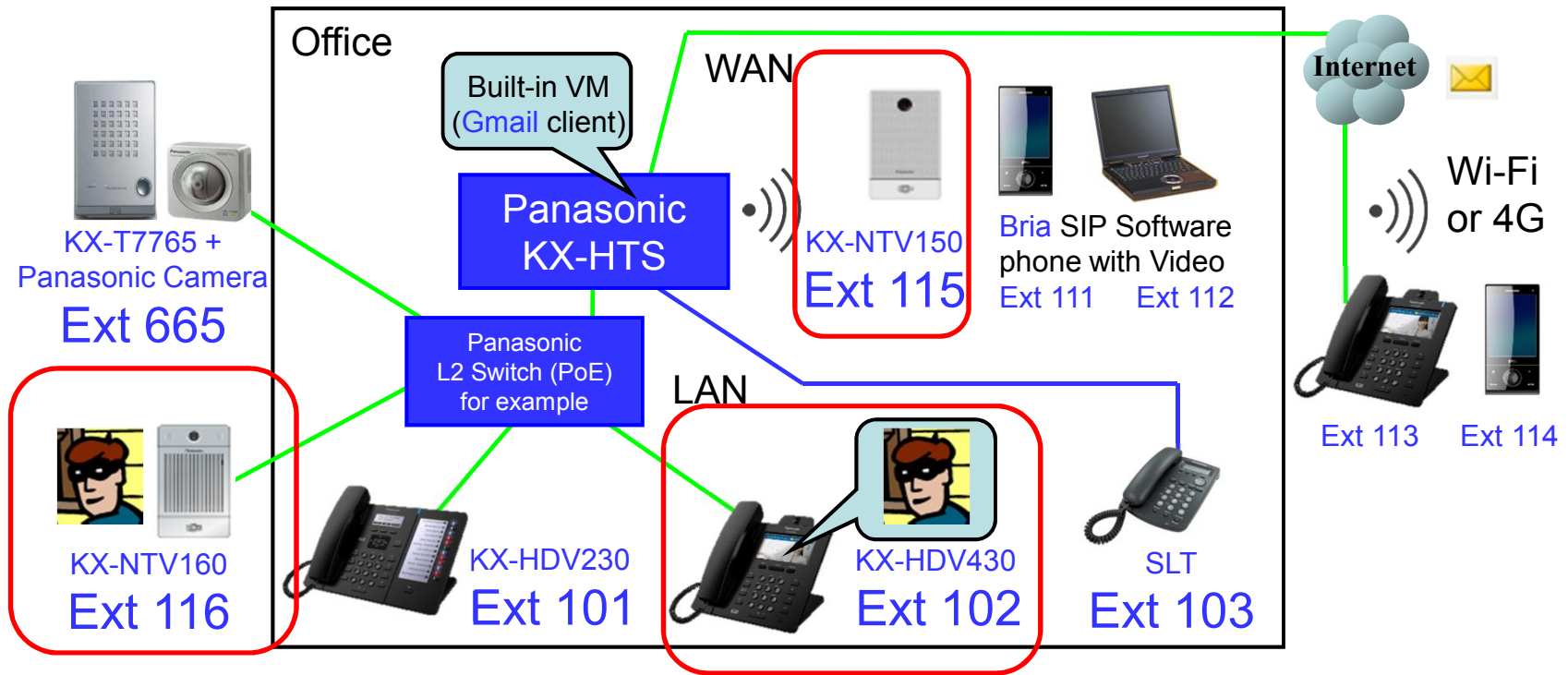**KX-HTS Step by Step Guide**

KX-NTV

August 5, 2016

Panasonic System Networks
PBX SE team

Specifications are subject to change without notice.

1. Overview for Demo

PBX, phone and security camera can be provided by Panasonic.
Other major PBX maker do not have security camera.

2. Table of Contents

Chapter	Contents
1	KX-HTS programming
2	KX-NTV : Initial setup
3	KX-NTV : SIP registration and video

Chapter 1
KX-HTS Programming

11. Click Port to change to SIP.

Click port 116 for example.

KX-HTS

KX-NTV150
Ext 115

LAN

KX-NTV430
Ext 102

L2 Switch
with PoE

KX-NTV160
Ext 116

12. Change the port to SIP.

13. Assign SIP Password.

Confirm User Name and Location also. Click [Apply].

14. Enable Video Call.

PBX Configuration > 2.Extension > 1.Port
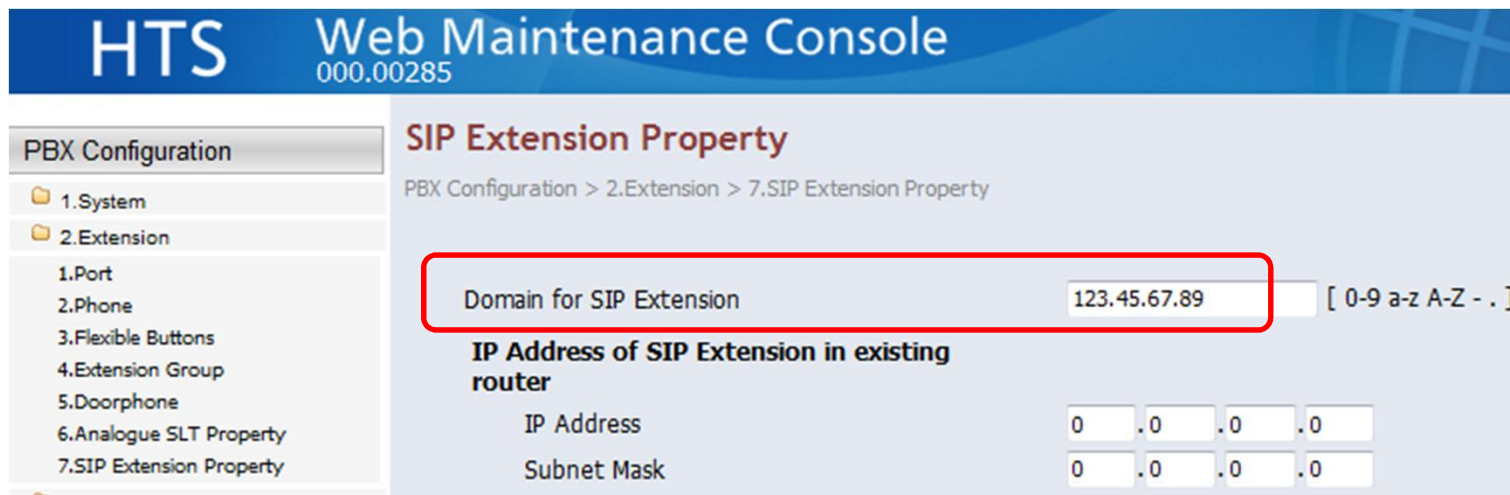
SIP Extension			
SIP Registration Status	Not yet		
SIP User Name	phone-016	[0-9 a-z A-Z - .]	
Registration Password	Edit		
Current IP Address			
Current MAC Address			
Phone Location	⦿ Local	○ Remote	○ Remote(G.729)
Alive Check	⦿ Enable	○ Disable	
Alive Check - Interval	60	(seconds)	
Packet Sampling Time	20	(ms)	
DTMF	Outband(RFC2833)		
Video Support	⦿ Enable	○ Disable	
Call Limit	8		

15. Assign SIP Domain Name.

SIP domain name is required for stronger security.

123.45.67.89 is example.
Some SIP phone does not support character (a-z A-Z) for SIP domain name.

16. Confirm SIP Port Number.

Chapter 2
KX-NTV (Initial Setup)

21. Initialize KX-NTV.

If KX-NTV has bee already registered to other PBX, it is required to initialize. Keep pressing reset button for 30s.

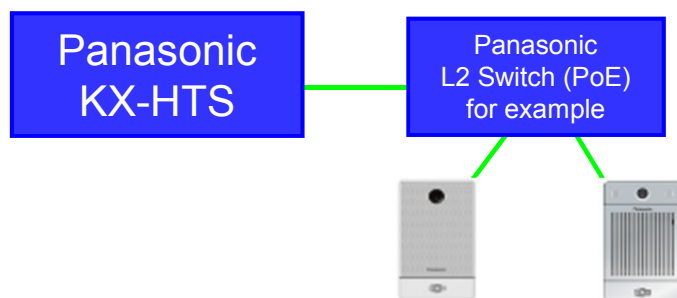<KX-NTV150>   <KX-NTV160>

22. Connect KX-NTV to PoE L2-Switch.

Connect KX-NTV150/160 to KX-HTS through PoE L2-Switch.
KX-NTV150/160 gets IP address.
(KX-NTV is not registered as SIP extension automatically.)

- Wait until yellow LED starts flashing.
- LED : Red (15s) -> Off (10s)-> Red (20s) -> Yellow Flash

23. Find IP address of KX-NTV using IW.exe.

Installation Wizard

Search

#	MAC	IP Address	Model	Firmware Version
1	00-02-D1-3D-F7-41	192.168.0.153	KX-NTV160	0101a
2	E8-B1-FC-B5-5E-32	10.75.70.127	ST7501	1.11.0.1

Panasonic
KX-HTS

Panasonic
L2 Switch (PoE)
for example

IW.exe

http://www.panasonic.net/pcc/support/pbx/download/ntv/index1.html
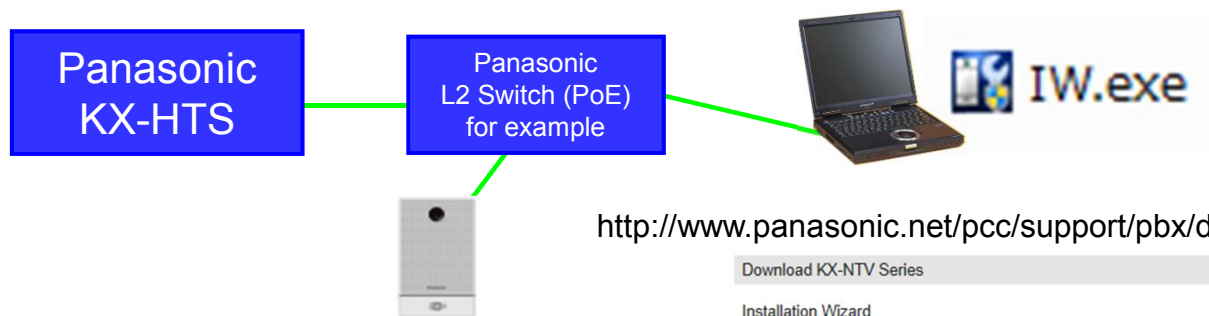
Download KX-NTV Series

Installation Wizard

Category	Name	Size
Application	▸ IW_v1.02.zip	2.52MB
Manual	▸ Installation Wizard User's Manual	
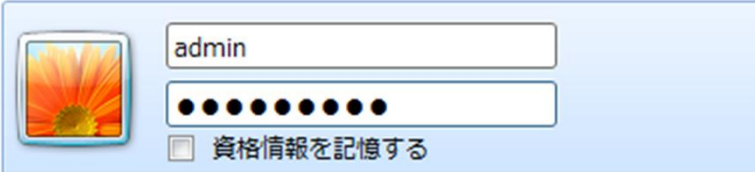
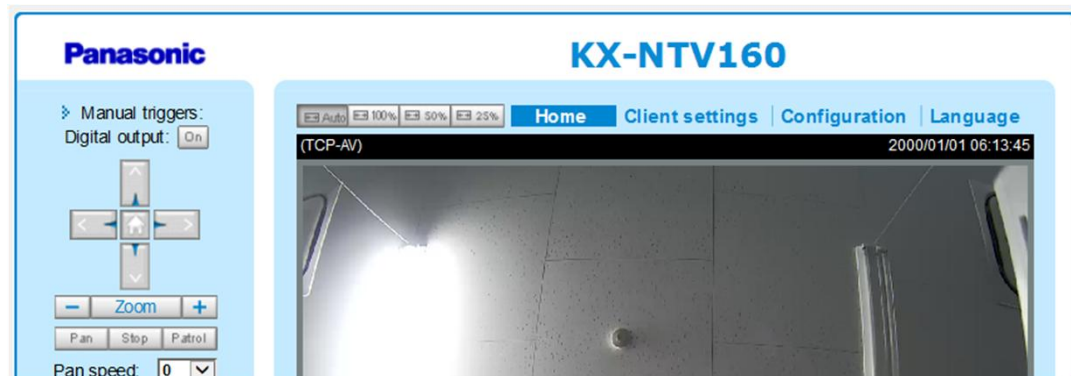# 24. Log-in using Internet Explorer.
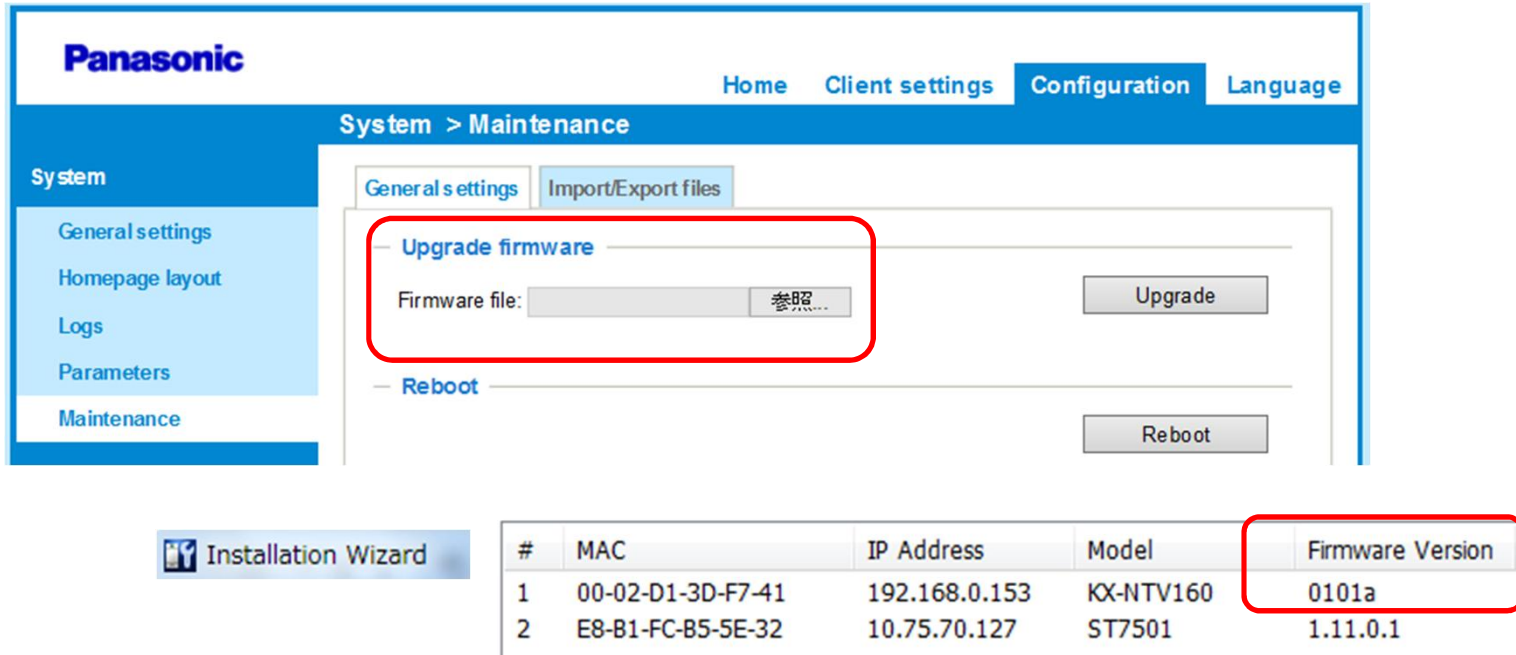
Log-in to KX-NTV.
  ID = admin
  Password = adminpass

If web browser is Internet Explorer, add-in module is installed automatically as camera viewer.

25. Update Firmware.

Software of KX-NTV has to be version 0101e or later.
If software version is 0101d (first mass production version), KX-NTV SIP registration is not possible for KX-HTS.

26. Connect KX-NTV150 by Wireless.

Panasonic

Home   Client settings   Configuration

Network > Wireless

- System
- SIP
- Media
- Network
  - General settings
  - Wireless

☑ Enable WiFi

WLAN configuration

SSID	KX-HTS
Wireless mode	Infrastructure ▾
Security	WPA-PSK ▾
pre-shared key	

HTS   Web Maintenance Console
000.00285

- Configuration
- ork Configuration
  - WAN
  - LAN
  - Route

WLAN Security Settings

AP related security configuration settings.

AP name	MyAP ▾
SSID	KX-HTS

KX-HTS •))
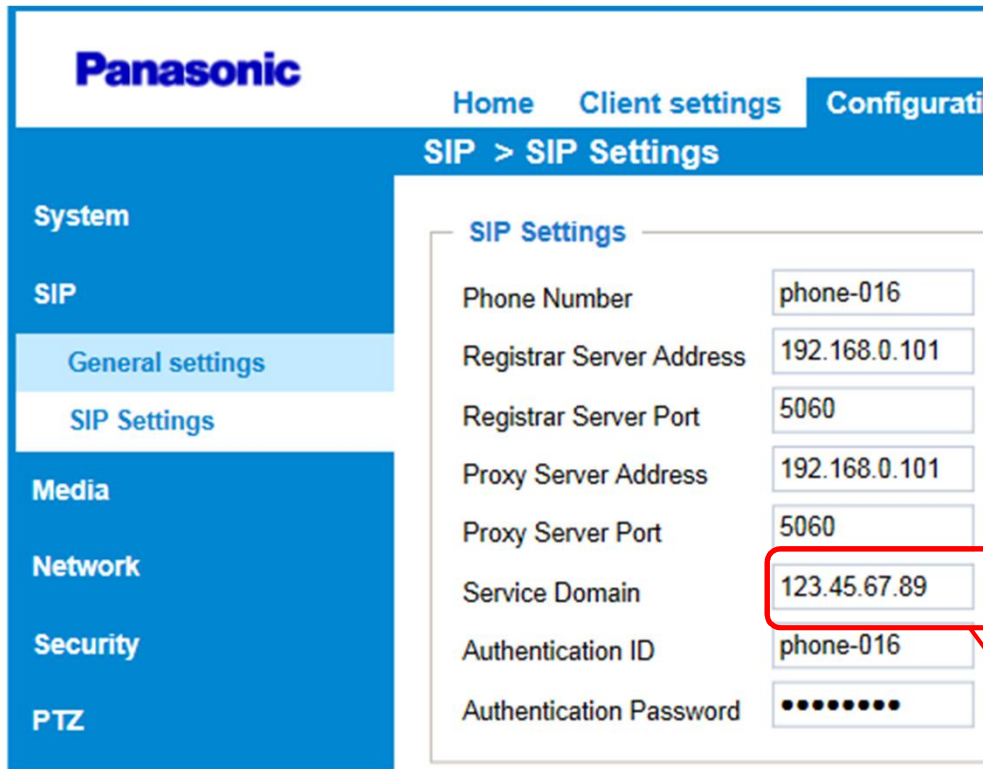
Remove LAN and connect AC Adapter.

IW.exe

IP address of KX-NTV150 does not change usually, even if Wi-Fi is used..

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Chapter 3
KX-NTV (SIP & Video)

31. Log in to KX-NTV for SIP registration.

Panasonic

Home   Client settings   Configurati

SIP > SIP Settings

- System
- SIP
  - General settings
  - SIP Settings
- Media
- Network
- Security
- PTZ

SIP Settings

Phone Number	phone-016
Registrar Server Address	192.168.0.101
Registrar Server Port	5060
Proxy Server Address	192.168.0.101
Proxy Server Port	5060
Service Domain	123.45.67.89
Authentication ID	phone-016
Authentication Password	••••••••

KX-HTS

192.168.0.101 : 5060
Domain : 123.45.67.89

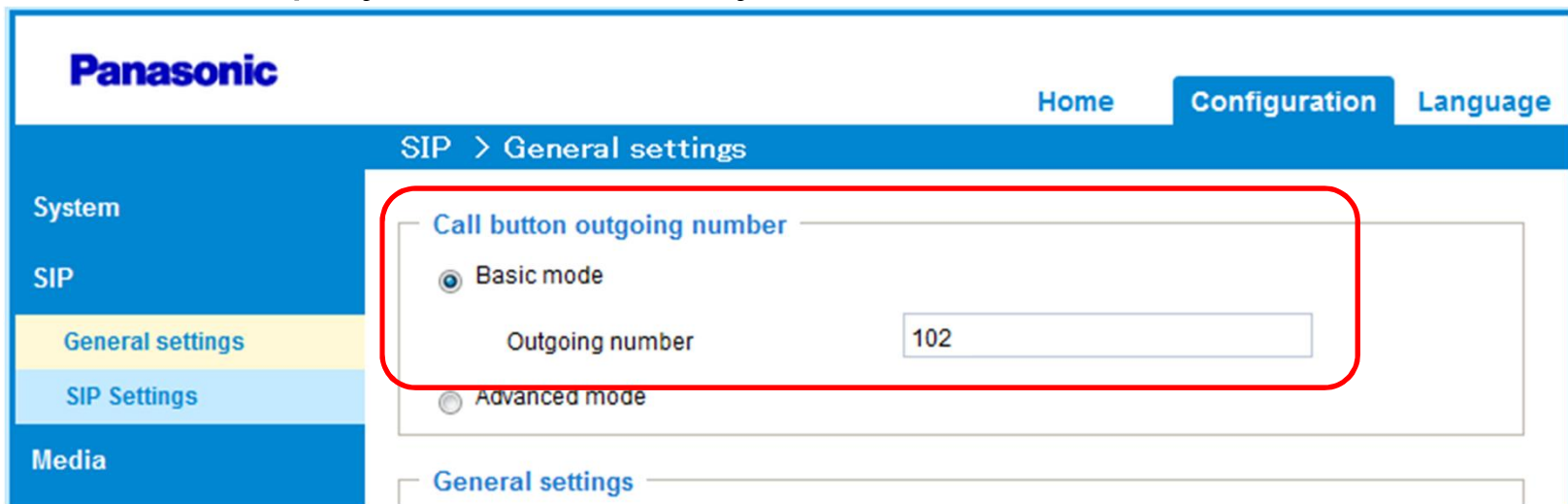115 : phone-015 : ****
116 : phone 016 : ****

LED becomes green after registration.

"Phone Number" is not extension number.

192.168.0.101 if domain is not programmed in KX-HTS.

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32. Assign Destination of Call Button.

Video is displayed automatically after call is answered.

KX-NTV115
Ext 115

SIP Software phone
Ext 111

KX-NTV160
Ext 116

KX-HDV430
Ext 102

If the destination is extension number for group, group call is also available.

34. Assign KX-NTV as Camera.
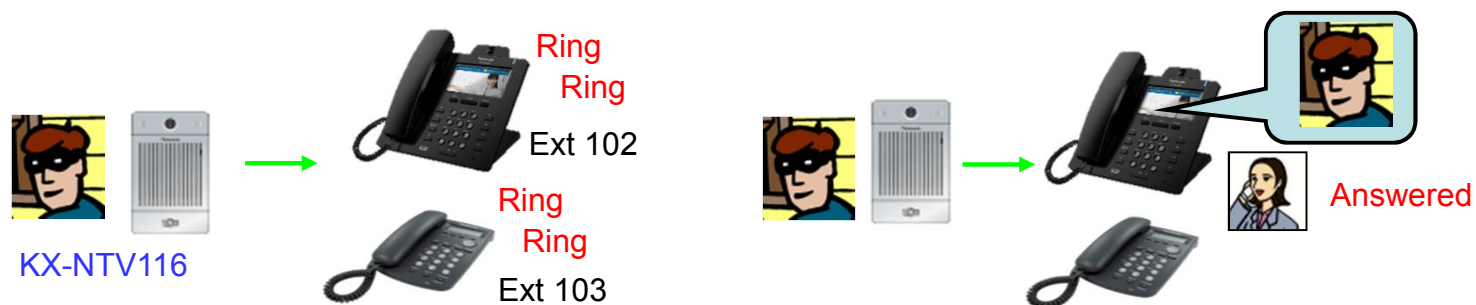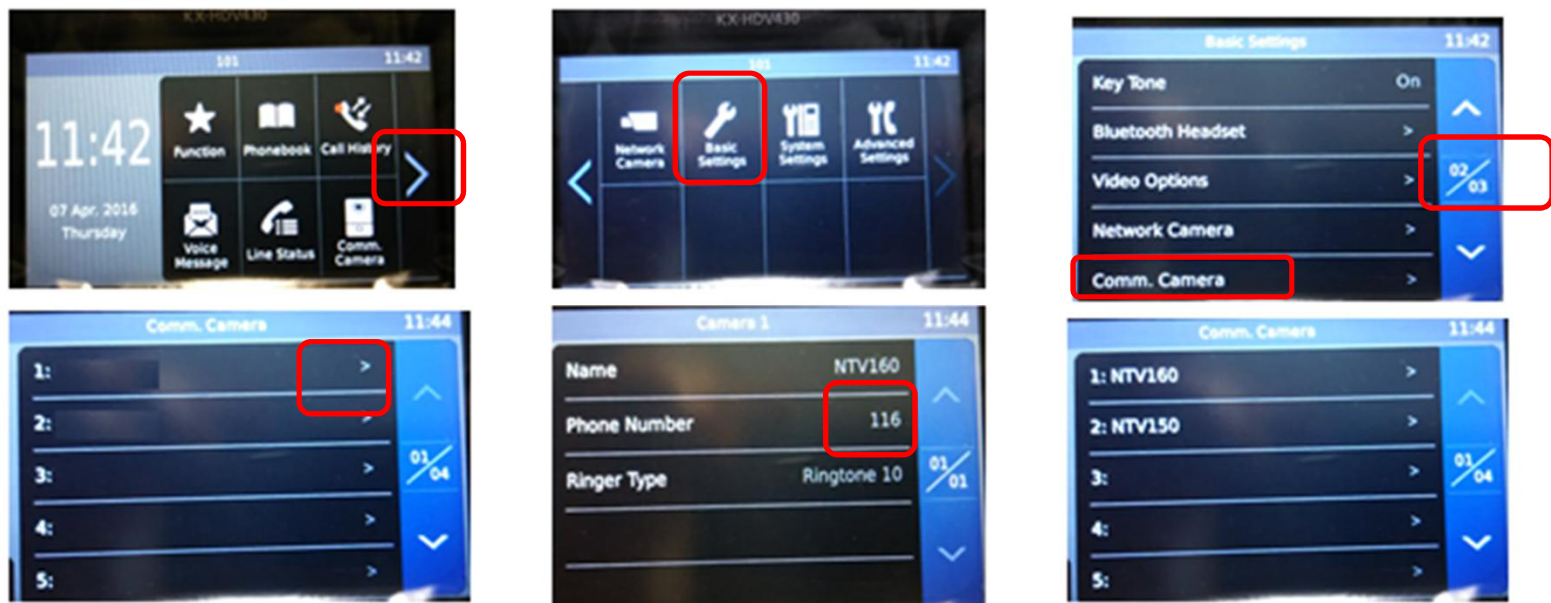
Video can be displayed automatically before KX-HDV430 answers the call from KX-NTV, if extension number of KX-NTV is assigned.

KX-HDV430 answers the call from KX-NTV automatically at technical point of view in order to start video communication if this feature is enabled by KX-HDV430. Voice from KX-HDV430 is muted until "Off hook" manually. This feature cannot be used for group call because one of KX-HDV430 answers the call.

35. Adjust General Settings.

<KX-NTV150>

<KX-NTV160>

Default of call ring duration is 30s. This is too long for demo.
KX-HDV430 can call KX-NTV150 without tone by above programming example.

36. Adjust Video for KX-HDV430 display.

37. Assign 512 K bps to Maximum bit rate.

Media > Video

Stream

▷ Video settings for stream 1 (RTSP)

▼ Video settings for stream 2 (SIP)

⦿ H.264

Frame size: `1280x720 ▾`

Maximum frame rate: `30 fps ▾`

Intra frame period: `1 S ▾`

Video quality

○ Constant bit rate:

⦿ Fixed quality:

Quality: `Good ▾`

Maximum bit rate: `Customized ▾` `512` Kbps [20~8000]

Default is 1000 K bps.
Default is too big if KX-NTV to call SIP extension through internet.

Thank you !

https://namlong.vn Hotline: 092 888 2345

Revision

Date	No.	Change
June 30, 2015	All	First draft
July 23, 2015	All	2nd draft
June 15, 2016	All	3rd draft
July 28, 2016	All	Step by step guide was divided for KX-NTV.
		First official release
August 5, 2016	16 (Page 10) 31 (Page 19)	Default of SIP port number is 5060.
	26 (Page 17)	Remove LAN.
	33 (Page 21)	SLT is used as example for group call.
	36 (Page 24)	Recommendation of frame size was revised.