

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

# KX-HTS Step by Step Guide Initial Set-up

**August 8, 2016**

Panasonic System Networks  
PBX SE team

Specifications are subject to change without notice.

# 1. Very Easy Installation

KX-HTS can be installed very easily.

Only **Plug and Play** are required for basic use.

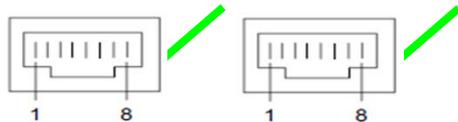
Basic settings are programmed automatically after initialize.

- All extension users can make a call to analog CO.
- All extension users can receive a call from analog CO.

**Plug and Play** even for **KX-HDV SIP phone** !

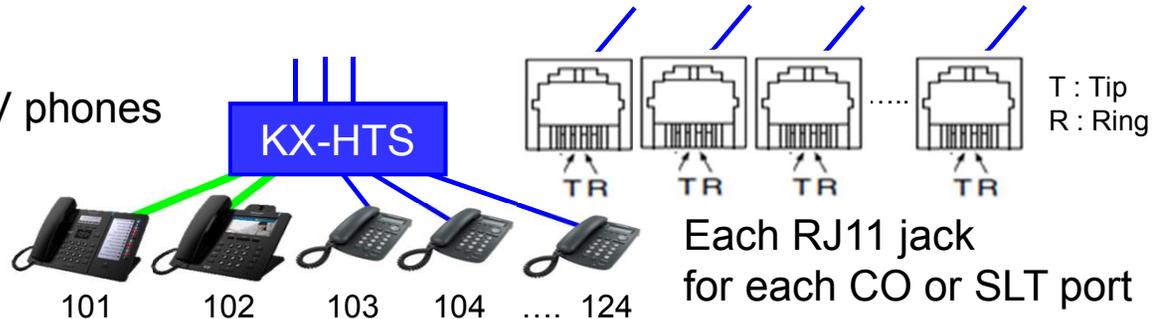
< Easy Cabling >

2 RJ45 jacks for 2 KX-HDV phones



PoE is not supported.

L2-switch is required for 3 or more SIP phones.



Each RJ11 jack for each CO or SLT port

## 2. Manual (PDF) and Software

Manual (PDF) and latest software for this product are available on the following Panasonic web site:

<http://www.panasonic.net/pcc/support/pbx/>

Some of the documentation requires the following password :

**2ufrompanasonic**

Leaflet is packed in KX-HTS for this information.

This document (Step by step guide) explains summary only.

It is important to **read manuals and leaflet** before selling and installing this product.

For User

**Information about the Documentation**

The documentation for this product is available on the following Panasonic web site:  
<http://www.panasonic.net/pcc/support/pbx/>  
Some of the documentation requires the following password:  
2ufrompanasonic

La documentación de este producto está disponible en el siguiente sitio web de Panasonic:  
<http://www.panasonic.net/pcc/support/pbx/>  
Para acceder a parte de la documentación se necesita la siguiente contraseña: 2ufrompanasonic

A documentação para este produto encontra-se no seguinte site da Panasonic:  
<http://www.panasonic.net/pcc/support/pbx/>  
Alguns documentos requerem a seguinte senha: 2ufrompanasonic

Документация по данному изделию находится на веб-сайте корпорации Panasonic:  
<http://www.panasonic.net/pcc/support/pbx/>  
Для доступа к некоторым документам требуется следующий пароль:  
2ufrompanasonic

Документація по даному виробу знаходиться на веб-сайті корпорації Panasonic:  
<http://www.panasonic.net/pcc/support/pbx/>  
Для доступу до деяких документів потрібен наступний пароль:  
2ufrompanasonic

PNQW4791ZA-VB P0715HH0

## 3. Software Version

Software of KX-HTS, KX-HDV and KX-NTV has to be latest.

**KX-HTS** version 1.5 supports followings.

- (1) Phone book on LCD of KX-HDV by PBX system speed dial
- (2) CO button of KX-HDV230
- (3) Conference by SLT

Software version up of **KX-HDV** phone is also required for (1) and (2).

Software of **KX-NTV** has to be version 0101e or later.

If software version is 0101d (first mass production version), KX-NTV cannot be connected to KX-HTS.

(KX-NTV first version can be connected to KX-NS/NSX only.)

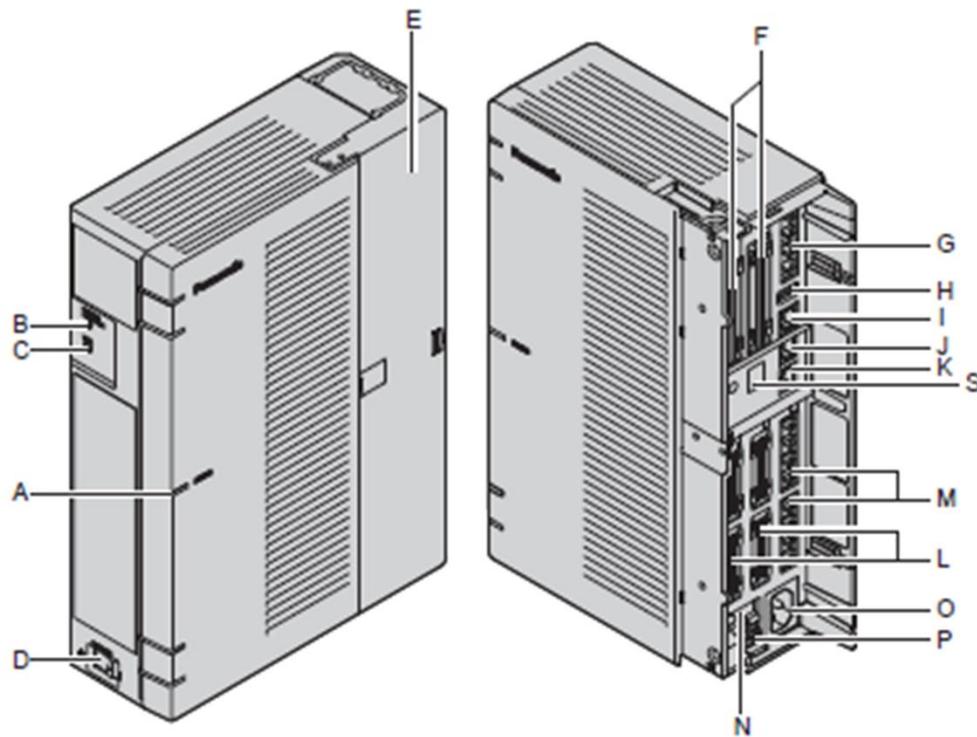
## 4. Table of Contents

Chapter	Contents
1	Installation and Initialize
2	Web Maintenance Console
3	Phone Connection
4	CO Line Connection
5	IP Configuration : LAN / Wireless LAN / WAN

# Chapter 1

## Installation & Initialize

# 11. Appearance



A	STATUS Indicator
B	Initialize Switch
C	WPS Switch
D	Power Switch
E	Cable Cover
F	Trunk/Doorphone Free Slot
G	CO4 Interface
H	USB Port
I	WAN port
J	LAN/WAN port
K	LAN port

L	Extension slot
M	SLT8 Interface
N	FG Terminal
O	AC Inlet
P	External Battery
Q	Extension Card Slot
R	Trunk/Doorphone Card Slot
S	Hook Clip

## 12. Card Installation

Optional card has to be installed during power-off.

1. Power Off.
2. Remove AC cable and open a cover.
3. Install required cards to KX-HTS.

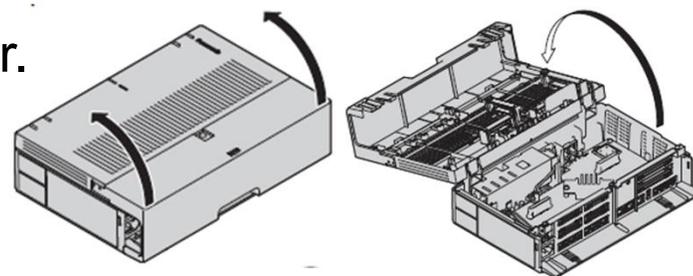
Do not turn on power when a cover is opening.

Remove blank panel perfectly.

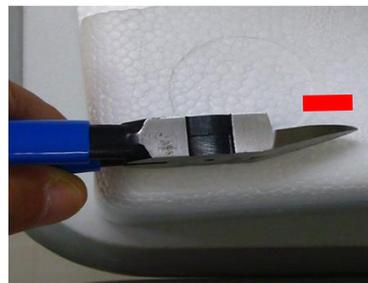
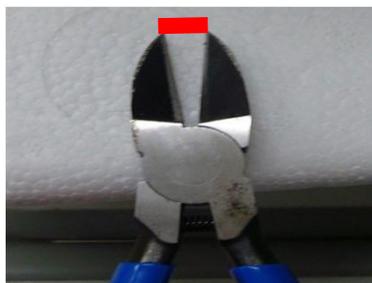
Otherwise optional card cannot be installed.

**Do not use a knife.** Installer may be injured.

Use a nipper.



 More than 1 cm



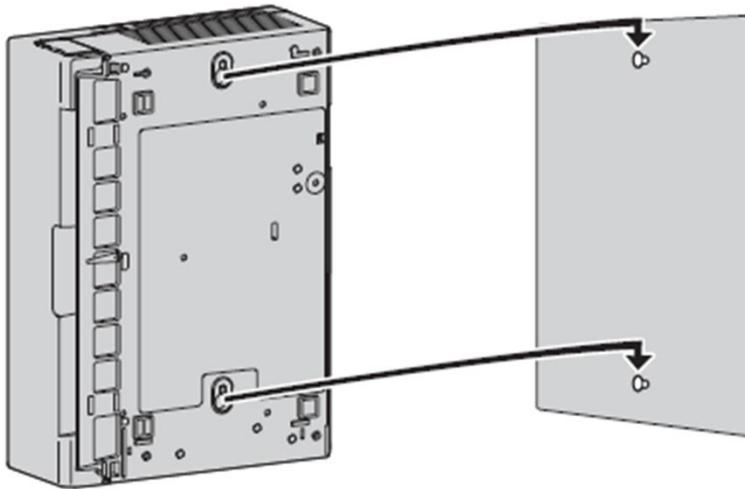
**This is not OK.**

(This picture is not KX-HTS.)

## 13. Wall Mounting

Install KX-HTS on wall.

KX-HTS supports router with Wireless LAN function.



Unpack the box and check the items below:

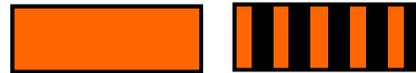
- Main unit
- AC power cord
- Strap band
- Screw × 2 (For Wall Mounting)
- Washer × 2 (For Wall Mounting)

## 14. Initialize

KX-HTS PBX has to be initialized at first before programming.  
Operation and System LED (A) are as follows.

1. Keep pressing Initialize button (B).
2. Power On (D).

(a) Amber On : 4 sec



(b) Amber rapid flash starts.

(c) Green rapid flash starts.

3. During (c), release Initialize button.

(d) Green rapid flash : 60 sec

4 flash / sec

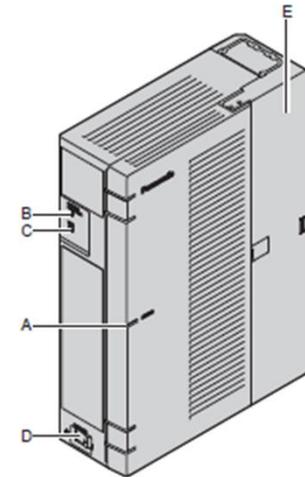


=> After system is initialized, system LED becomes green on.



If only power on, green slow flash starts after (a).

It takes for 60 sec. 1 flash / sec



## 15. Default Data

Basic settings are programmed automatically after initialize.

- All extension users can make a call to analog CO.
- All extension users can receive a call from analog CO.

<Default of Floating Extension Number & Name>

Item	Name	Ext
VM	VM	500
DISA-1	DISA	501
DISA-2	DISA	502
DISA-3	DISA	503
DISA-4	DISA	504
DISA-5	DISA	505
DISA-6	DISA	506
DISA-7	DISA	507
DISA-8	DISA	508
DISA-9	DISA	509
DISA-10	DISA	510

Item	Name	Ext
Group -1	Group	601
Group -2	Group	602
Group -3	Group	603
Group -4	Group	604
Group -5	Group	605
Group -6	Group	606
Group -7	Group	607
Group -8	Group	608
Group -9	Group	609
Group -10	Group	610
Group -11	Group	611
Group -12	Group	612
Group -13	Group	613
Group -14	Group	614
Group -15	Group	615
Group -16	Group	616

Item	Name	Ext
Door-1	Door	665
Door-2	Door	666
Meet Me-1	Conference room	691
Meet Me-2	Conference room	692
Meet Me-3	Conference room	693

# Chapter 2

## Web-MC

## 21. Connect PC.

Connect PC to LAN port of KX-HTS.

IP address of PC is provided automatically by KX-HTS, if PC is DHCP client.

DHCP server function of KX-HTS is enabled by default.

Access to 192.168.0.101 from PC using web.

Web application should be one of following.

- Internet Explorer 9-11
- Firefox
- Chrome



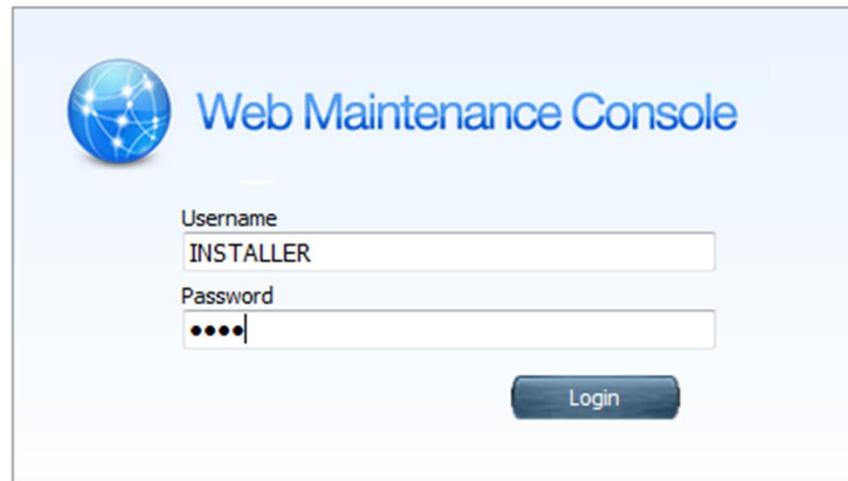
Smart-phone and Tablet are not recommended.

## 22. Log-in.

Username : INSTALLER

Password : 1234

Click [Login]



The screenshot shows a login interface for the 'Web Maintenance Console'. It features a blue header with a globe icon and the text 'Web Maintenance Console'. Below the header, there are two input fields: 'Username' with the value 'INSTALLER' and 'Password' with four dots representing the password '1234'. A 'Login' button is positioned below the password field.

## 23. Start Easy Set-up.

1. Select language.
2. Select location. This selection is not required and not displayed usually.
3. Change password from “1234”.
4. Click [Start Setup Wizard].

**Easy Setup Wizard**

**Welcome to Panasonic KX-HTS**

**WebMC Language**

English (US) ▼

**Password Setting**

Installer Password (4-16 characters, [A-Z,a-z,0-9]) ●●●●

Re-enter ●●●●

CAUTION: It is strongly recommended that a password should be complex for maximum protection. Change the password periodically.

Start Setup Wizard

English (US) ▼  
English (US)  
English (UK)  
Spanish  
French  
Russian  
Portuguese (BR)

# 24-1. Step 1

1. Select correct time zone and time.
2. Click [Next].

## Easy Setup Wizard



### 1.Date & Time

Time Zone (Hour-Minute)	+9	-	0		
Local Time (Year-Month-Day)	2016	-	6	-	3
(Hour-Minute-Second)	12	-	39	-	1

Time is assigned using 24-hour.  
12:00AM = 00:00 / 01:00AM = 01:00 / 12:00PM = 12:00  
04:00PM = 16:00 / 08:00PM = 20:00 / 11:59PM = 23:59

**Daylight Saving**

Enable  Disable

If time zone is incorrect, e-mail may not be sent correctly.



## 24-2. Step 2

1. Select parameter. (Default is OK.)
2. Click [Next].

### Easy Setup Wizard



### 2.Numbering

#### Idle Line Access (Local Access)

0 or 9

None

#### Extension Number

11-34

101-124

201-224

When “None” is selected for Local Access, “0” or “9” is not required to call trunk. This also can be effective by full programming mode later.

Previous

Next

Close

## 24-3. Step 3

1. Select parameter. (Default is OK.)
2. Click [Next].

**Easy Setup Wizard**

**3.Incoming Call**

DIL / Doorphone

Destination

601 / Group

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

601 / Group

Previous Next Close

## 24-4. Step 4

1. Select **international access code** to restrict calling by TRS.
2. Dialing type is for USA. (Default is OK for other area.)
3. Click [Next].

Dialing plan of PSTN in USA is very complicated.

**Easy Setup Wizard**

**4. Dialling Plan**

**International Access Code**

00       010       011

Other (6 digits)  [0-9]

**Local Area Code**

Local Area Code (6 digits)  [0-9]

**National Dialing Type**

None       TypeA       TypeB

TypeC

Leading Number (32 digits)

N11  
NXXXXXX  
1NXXNXXXXXX  
(N=2-9,X=0-9,P=0,1)

Previous      Next      Close

TRS = Toll Restriction / Call Barring

## 24-5. Step 5

1. Click [Finish]. (Default is OK.)

**Easy Setup Wizard**

**5.IP**

**1 Date & Time**

**2 Numbering**

**3 Incoming Call**

**4 Dialling Plan**

**5 IP**

**IP Address for LAN Port**

IP Address: 192 . 168 . 0 . 101

Subnet Mask: 255 . 255 . 255 . 0

**Use Built-in DHCP Server of KX-HTS**

Starting IP address: 192 . 168 . 0 . 102

Ending IP address: 192 . 168 . 0 . 254

**IP Address of SIP Extension in existing router**

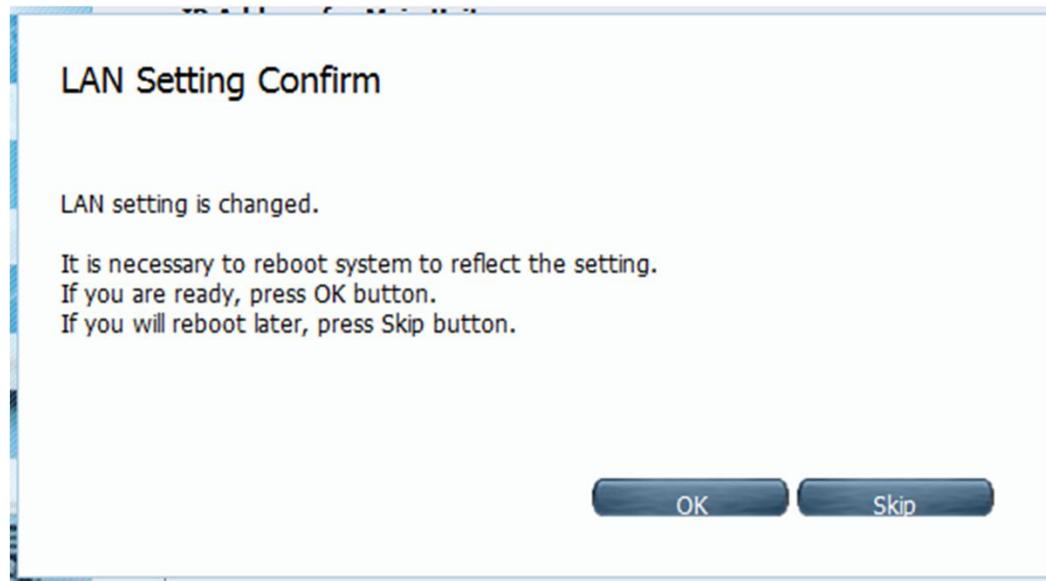
IP Address: 192 . 168 . X . X  
(X:Wildcard)

This has to be programmed when WAN port of KX-HTS and SIP extensions are connected with the existing router.

Previous Finish Close

## 25. Finish Easy Set-up.

1. Click [Skip] to continue programming.



## 26. Web-MC Full Programming

Easy Set-up is available only one time after initialize.  
Full programming mode is available from next connection.

If software of KX-HTS is not latest, it is **important to upgrade software to latest version** now after Easy Set-up.

See step by step guide No.9 for details.

It is better to initialize and do Easy Set-up again after version up just in case for new installation.

The image shows two screenshots of the HTS Web Maintenance Console. The left screenshot is the login page, featuring a globe icon, the title 'Web Maintenance Console', and fields for 'Username' (with 'INSTALLER' as a placeholder) and 'Password' (with masked characters). A 'Login' button is at the bottom. An arrow points from this page to the right screenshot, which is the main configuration interface. The right screenshot has a blue header with 'HTS Web Maintenance Console' and '000.00211'. It includes a language dropdown set to 'English (US)' and a 'Save & Logout' button. A left sidebar lists menu items: 'PBX Configuration' (expanded to show '1.System', '2.Extension', '3.Trunk', '4.TRS/ARS', '5.System Speed Dialing', '6.Conference', '7.Voice Mail'), 'Network Configuration', and 'Maintenance'. The main area is titled 'PBX Configuration' and displays three rows of extension and trunk buttons. The first row shows extensions 119-124, with 101 and 102 highlighted in blue, and doorphone buttons 1 and 2. The second row shows extensions 111-118 and trunk buttons 5, 6, 7, 8. The third row shows extensions 103-110 and trunk buttons 1, 2, 3, 4.

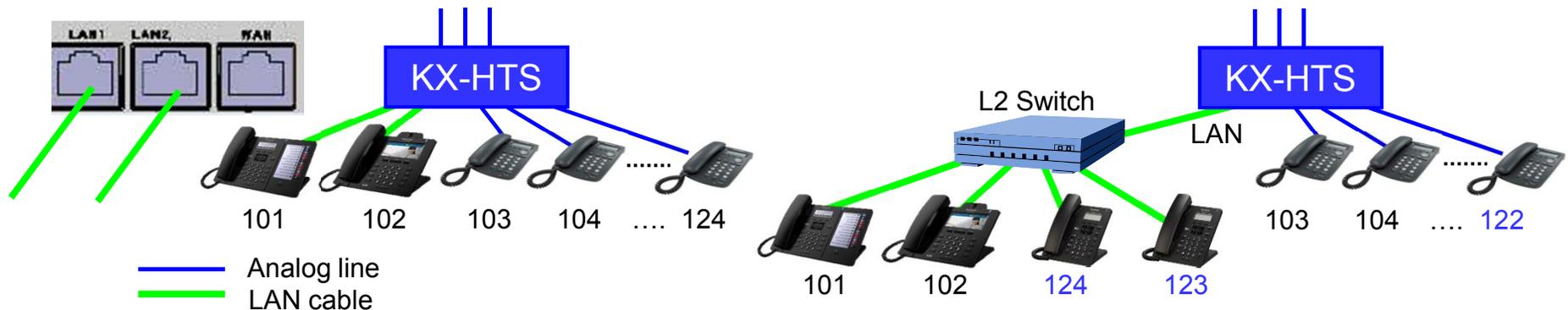
# Chapter 3

## Phone Connection

## 31. Connect Phones.

Total 24 KX-HDV phone and Analog SLT phone can be connected automatically **without any programming**.

- SIP phone registration is required manually for other SIP phone including KX-NTV.
- Extension 101 and 102 are for KX-HDV. 103 to 124 are for SLT.
- If more than 2 KX-HDV phones are connected, L2 Switch is required and **larger extension number is used for KX-HDV automatically** instead of SLT. SLT port of the extension does not work.



For example, 4 KX-HDV phones and 8 SLT phones can be connected without optional 8-port SLT card. Virtual card installation (like KX-NS) is also not required.

## 32. Initialize KX-HDV Phone.

If KX-HDV phone has been already registered to other SIP server or SIP carrier, it is required to initialize it in order to connect to KX-HTS.

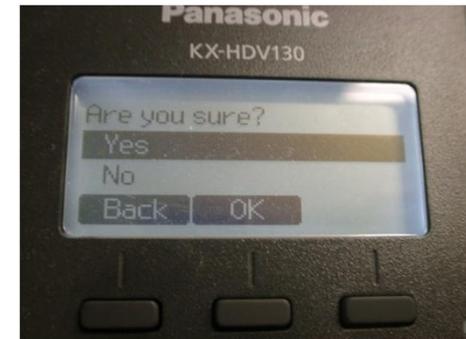
1. Select "System Settings".



2. Dial #136.



3. Select "Yes".



## 33. Connect Fax.

Fax has to be enabled for analog SLT port by programming.  
Fax data transmission does not work by default.

**Port**  
PBX Configuration > 2.Extension > 1.Port

Extension Number	108	[ 0-9 ]
Extension Name		
Attribution	Analog SLT6	
FAX Connection	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Manager	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
TRS Level (COS)		



<Apply> is required for any programming.

T.38 is not supported for SIP trunk and SIP extension.

G.711 and analog line are available for fax.

4 analog trunks (CO) and 8 analog extensions (SLT) are pre-installed by factory.

## 34. Adjust Flash Time of SLT.

Flash from analog SLT phone has to be adjusted.

On-hook roughly after talking becomes “Flash” sometimes.

This becomes cause of unexpected transferring or holding a analog CO.

This can be reduced by programming for range of Flash.

### Analog SLT Property

PBX Configuration > 2.Extension > 6.Analog SLT Property

SLT Off Hook Time	24 ms
SLT Off Hook Guard Time	96 ms
SLT Flash Detection	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

Flash Timing - Min.	24 ms
Flash Timing - Range	1528 ms

If the extension talked with other extension or SIP trunk, call is disconnected automatically because KX-HTS can detect disconnect from other party.

504ms (Min) and 208ms (Range) if Flash of SLT in your market is 600ms for example.

Hold recall starts immediately after Flash + On-hook.

If PBX is other Panasonic KX PBX and SLT flash mode is 1, hold recall starts after 60 seconds as “Ghost call”.

# Chapter 4

## CO Line Connection

# 41. Disable unused Analog CO.

Unused analog CO port has to be disabled. Select “No Connect”.  
When unused analog CO is selected automatically by Local Access operation (9/0),  
user cannot call through PSTN.

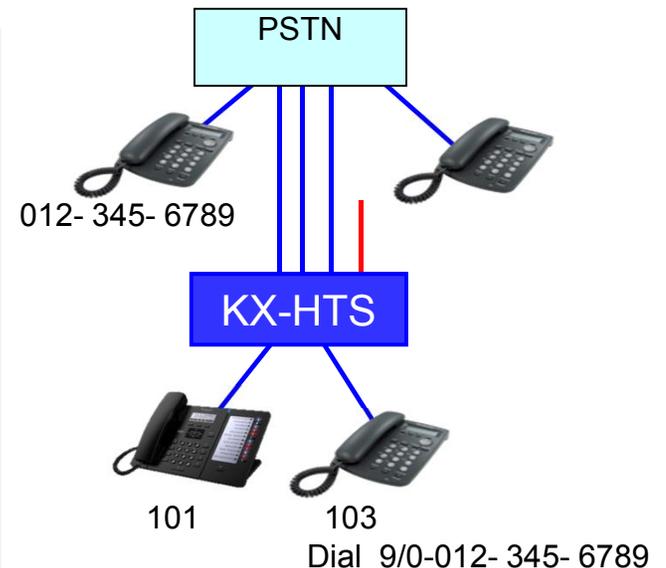
**Port**  
PBX Configuration > 3.Trunk > 1.Port

CO Line Number  
Attribution  
Local Access  
Trunk Group

**Analogue - Basic**  
Dialling Mode  
Caller ID Detection  
Caller ID Detection Pattern  
Reverse Detection

4.  
Analogue  
Analogue  
SIP Carrier - 1  
SIP Carrier - 2  
**No Connect**

DTMF  Pulse  
 Enable  Disable  
 FSK  DTMF  
 Disable  Outgoing  B



PSTN = Public Switched Telephone Network

## 42. Assign PSTN Dialing Plan.

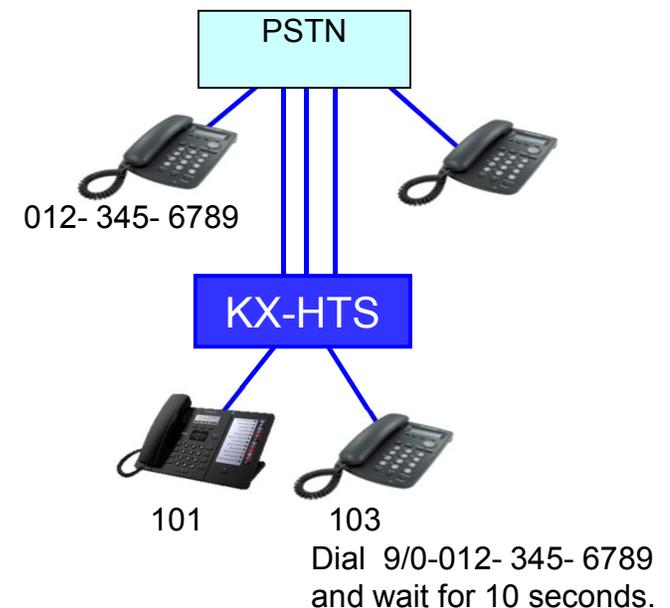
Dialing plan for Analog CO and SIP trunk has to be programmed for SLT user. SLT user has to wait for 10 seconds (default) after dialing all digits without this programming.

Local access number (9/0) has to be added.  
If dialing does not match with any entries, time-out is applied.

**Numbering Plan**  
PBX Configuration > 1.System > 4.Numbering Plan

Main Features Quick Dial **Dialing Plan**

No.	Trunk Dialing Plan (32 digits) [ 0-9 # * N X ]
1	<input type="text" value="9N11"/>
2	<input type="text" value="9N00XXXX"/>



## 43. PSTN Dialing Plan - Condition

SIP phone including KX-HDV can call without waiting and without programming, if operation is **dialing at first and off-hook** like operation of **cellular phone**.

This programming in the previous page is applied to KX-HDV also for operation : Off-hook and dialing.

Dialing plan for following features are assigned automatically for SLT and KX-HDV.

Extension call / Paging call / Call pick up  
Call Park / Speed Dial

If ARS is used, this programming in previous page is applied to dial before ARS modification.

## 44. Connect Analog CO and Confirm it.

Analog CO connection can be confirmed by calling PSTN using KX-HDV phone or analog SLT phone actually.

When CO button of KX-HDV is pressed, dial tone is made by KX-HDV virtually. (No dial tone from PSTN.)

<KX-HDV>

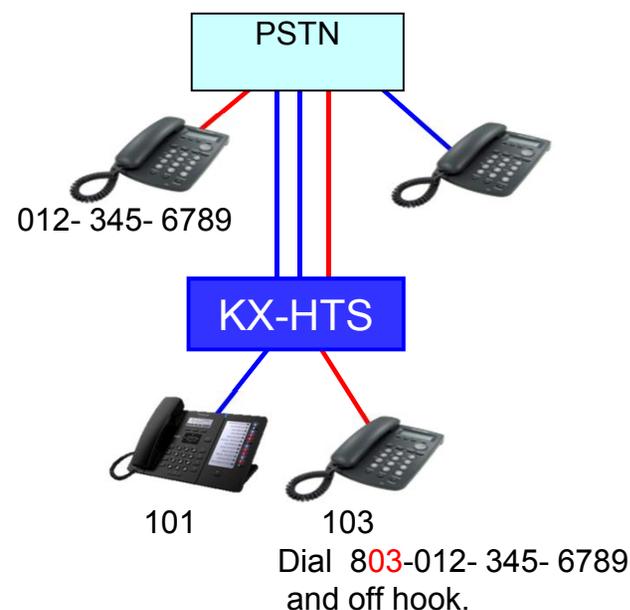
Dial 80 + CO number (1-8) + PSTN telephone number and Off hook.

=> Call starts.

<SLT>

Off hook and Dial 80 + CO number (1-8) + PSTN telephone number.

=> Call starts after 10s.



# Chapter 5

## IP Configuration

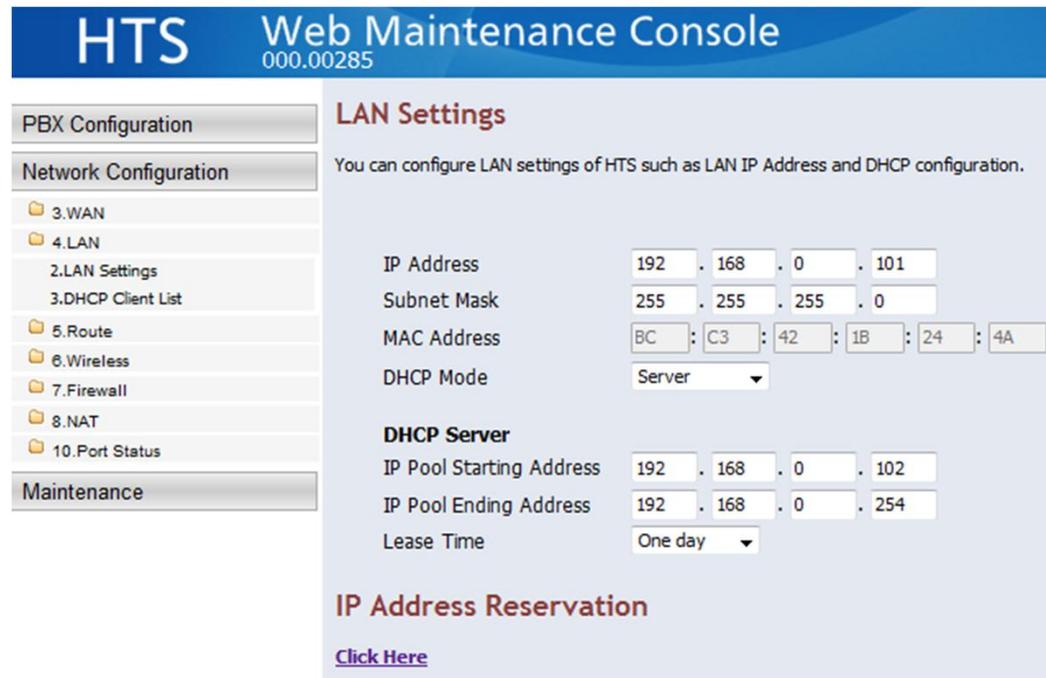
## 50. LAN / Wireless LAN / WAN

KX-HTS works as **router** with PBX.



# 51. LAN

IP address of IP terminal on LAN of KX-HTS is assigned automatically because KX-HTS supports DHCP server by default.



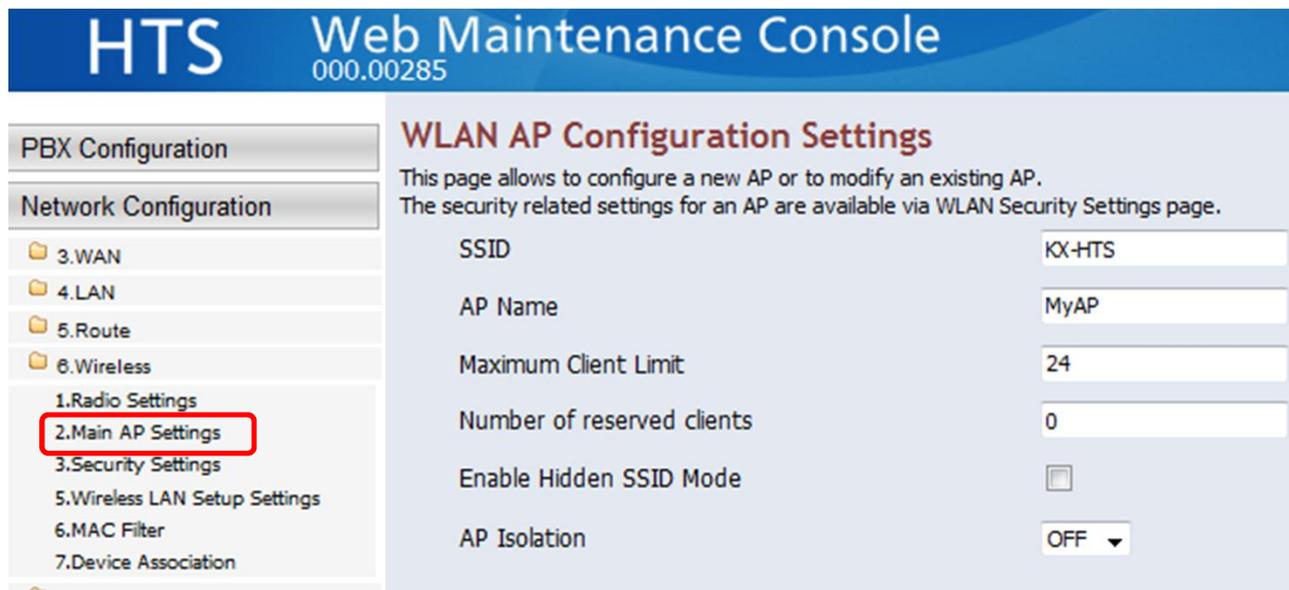
The screenshot shows the HTS Web Maintenance Console interface. The top header displays 'HTS Web Maintenance Console' and the IP address '000.00285'. A left-hand navigation menu includes 'PBX Configuration', 'Network Configuration', and 'Maintenance'. Under 'Network Configuration', options include '3.WAN', '4.LAN', '2.LAN Settings', '3.DHCP Client List', '5.Route', '6.Wireless', '7.Firewall', '8.NAT', and '10.Port Status'. The main content area is titled 'LAN Settings' and contains the following configuration fields:

- IP Address:** 192 . 168 . 0 . 101
- Subnet Mask:** 255 . 255 . 255 . 0
- MAC Address:** BC : C3 : 42 : 1B : 24 : 4A
- DHCP Mode:** Server (dropdown menu)
- DHCP Server:**
  - IP Pool Starting Address:** 192 . 168 . 0 . 102
  - IP Pool Ending Address:** 192 . 168 . 0 . 254
  - Lease Time:** One day (dropdown menu)

At the bottom of the LAN Settings section, there is a heading for 'IP Address Reservation' and a link labeled 'Click Here'.

## 52. Wireless LAN : SSID

**SSID** and Security Key have to be programmed using Web-MC to connect **PC, tablet, smart-phone** and so on using **Wireless LAN**. Default of SSID is “KX-HTS”.



The screenshot displays the HTS Web Maintenance Console interface. The top header shows "HTS Web Maintenance Console" with the IP address "000.00285". On the left, a navigation menu includes "PBX Configuration" and "Network Configuration", with "6. Wireless" expanded to show "2. Main AP Settings" highlighted in a red box. The main content area is titled "WLAN AP Configuration Settings" and includes a description: "This page allows to configure a new AP or to modify an existing AP. The security related settings for an AP are available via WLAN Security Settings page." Below this, several configuration fields are visible: SSID (KX-HTS), AP Name (MyAP), Maximum Client Limit (24), Number of reserved clients (0), Enable Hidden SSID Mode (unchecked), and AP Isolation (OFF).

Buffalo-G-ABAA   
App TEST AP   
Buffalo-G-3E3C   
KX-HTS 



## 53. Wireless LAN : Security Key

SSID and **Security Key** have to be programmed using Web-MC to connect **PC, tablet, smart-phone** and so on using **Wireless LAN**. Security key is not common by default to prevent from unexpected access.

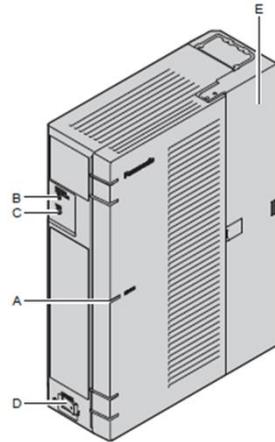
The image displays two screenshots related to wireless LAN security configuration. On the left is the 'WLAN Security Settings' page from a router's Web-MC interface. The left sidebar shows a navigation menu with '3.Security Settings' highlighted in a red box. The main content area is titled 'WLAN Security Settings' and includes fields for 'AP name' (MyAP) and 'SSID' (KX-HTS824). It is divided into three sections: 'Security Selection' (Security: WPA2, Authentication Type: Personal, Encryption Type: CCMP), 'WPA/WPA2 Settings' (Re-Key Interval: 3600), and 'Personal Settings' (Use PSK: unchecked, Pre-Shared Key: empty, Passphrase: HTSBCC3421B244A). A red box highlights the 'Pre-Shared Key' and 'Passphrase' fields. On the right is a Windows 'ネットワークに接続' (Connect to Network) dialog box. The title bar is in Japanese. The main text asks to enter a network security key. A red arrow points from the 'Security Key' input field in the dialog to the 'Pre-Shared Key' field in the router settings. Below the input field is a checkbox labeled '文字を非表示にする' (Hide characters). At the bottom, there are 'OK' and 'キャンセル' (Cancel) buttons. A green arrow points to a button with a key icon, with the text 'Connection is also available using this button of router.'

## 54. Wireless LAN : Setup button

If PC has to be connected to Wireless LAN for Easy Set-up after initialize, it can be connected by Setup button without security key.

1. Select “KX-HTS” as SSID by PC.
2. Press this button of KX-HTS.

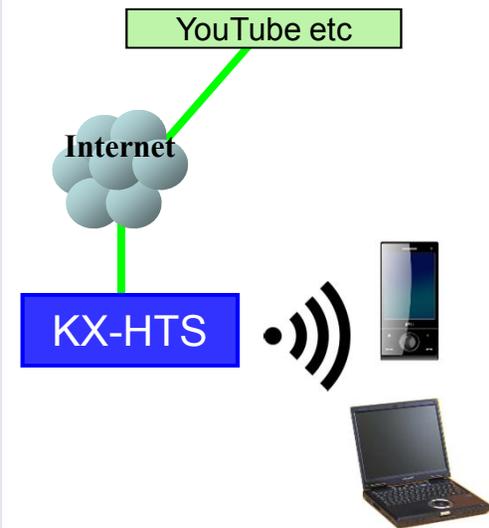
(C) is the button.



# 55. WAN for Internet

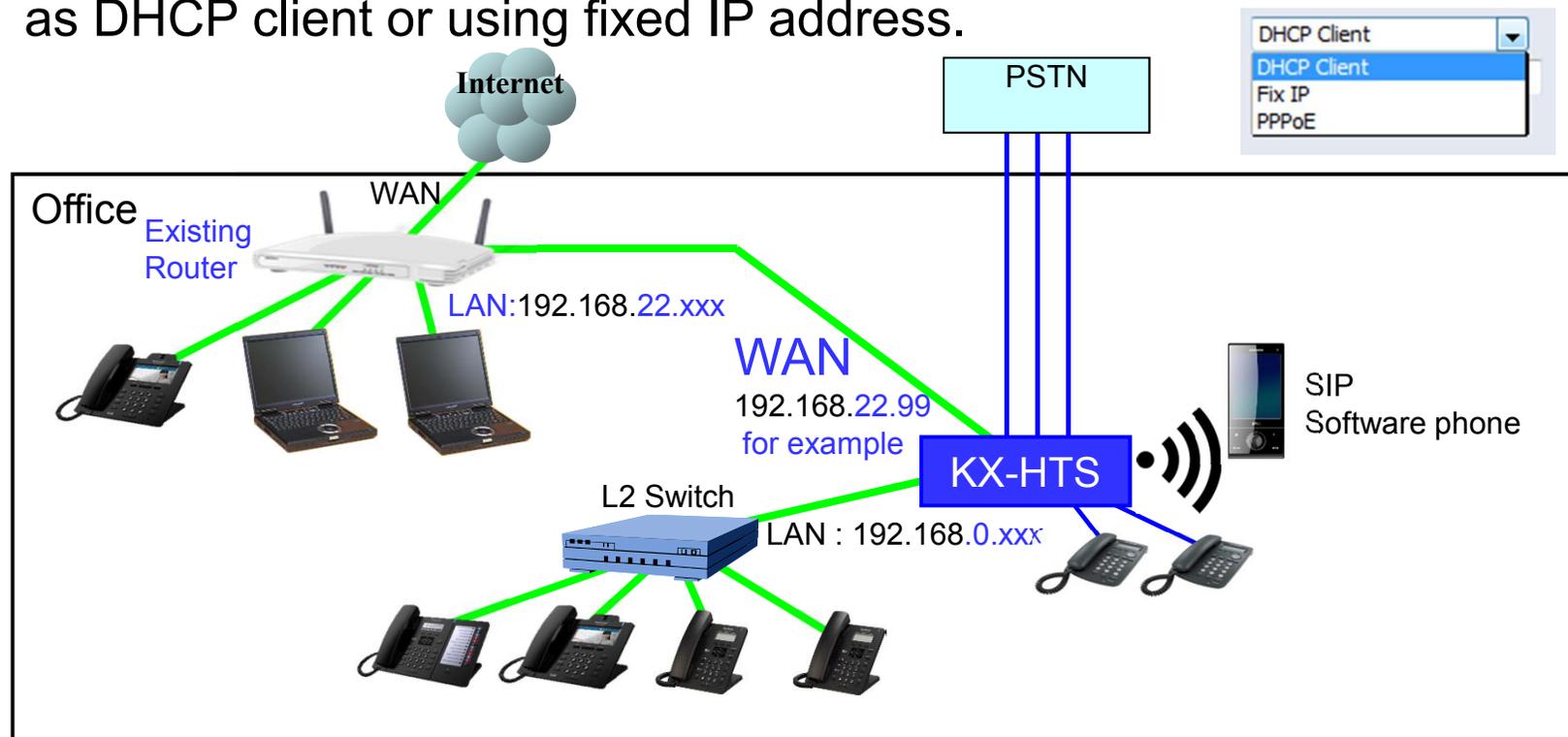
WAN port can be connected to internet by PPPoE usually.  
Ask User Name and Password to your internet provider.

The screenshot shows the 'HTS Web Maintenance Console' interface. The title bar includes 'HTS' and '000.00285'. On the left, there is a navigation menu with categories: 'PBX Configuration', 'Network Configuration', and 'Maintenance'. Under 'Network Configuration', there is a sub-menu for '3. WAN' containing items: '1. WAN Setting', '2. WAN Status', '4. DDNS', '4. LAN', '5. Route', '6. Wireless', '7. Firewall', '8. NAT', and '10. Port Status'. The main content area is titled 'WAN' and contains the text: 'HTS can be connected to your service provider in any of the following ways'. Below this text are several configuration fields: 'WAN TYPE' (a dropdown menu with 'PPPoE' selected), 'WAN connection Name' (a text input field), 'User Name' (a text input field), 'Password' (a text input field), 'Please retype your password' (a text input field), 'Service Name' (a text input field with '(optional)' next to it), 'Access Concentrator Name' (a text input field with '(optional)' next to it), and 'Relay LAN site PPPoE session' (a checkbox).



## 56. Connection to LAN of Existing Router

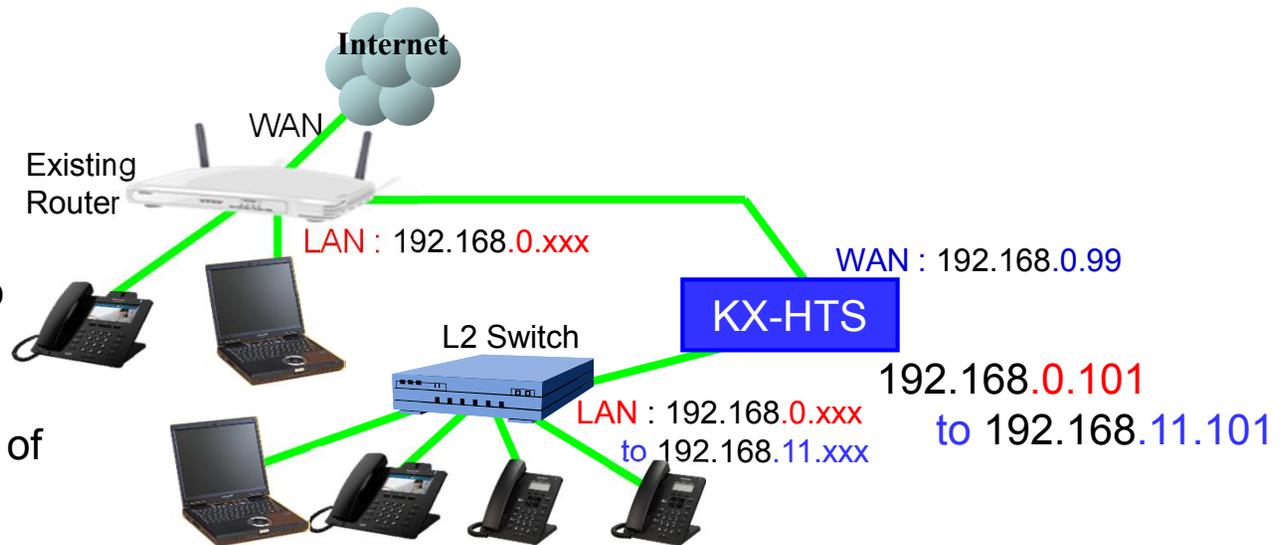
WAN port of KX-HTS has to be connected to LAN of existing router as DHCP client or using fixed IP address.



## 57. LAN of Existing Router - Condition

When same IP address is used for LAN of KX-HTS and LAN of existing router, LAN of KX-HTS does not work correctly.  
Program different segment of IP address to LAN of KX-HTS.

Dealer does not need to discuss with IP network administrator of existing router about IP address of each IP phone because segment is different.



# 58. Change IP address of LAN.

## LAN Settings

You can configure LAN settings of HTS such as LAN IP Address and DHCP configuration.

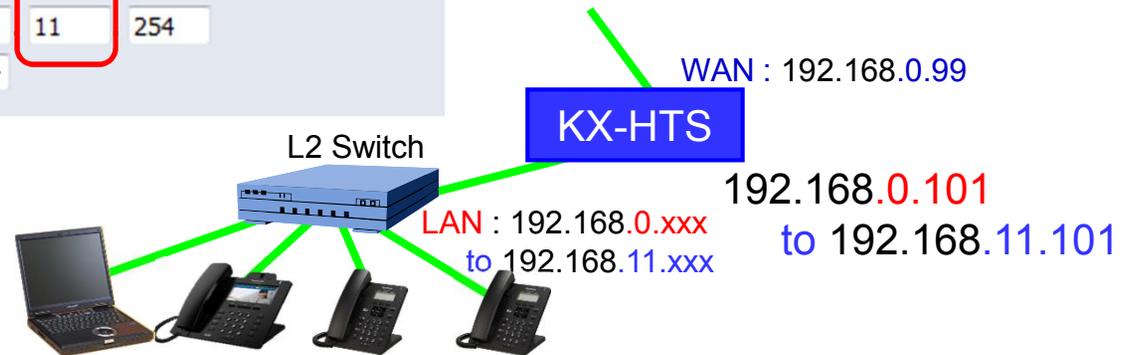
IP Address 192 . 168 . 11 . 101  
Subnet Mask 255 . 255 . 255 . 0  
MAC Address BC : C3 : 42 : 1B : 24 : 4A  
DHCP Mode Server

### DHCP Server

IP Pool Starting Address 192 . 168 . 11 . 102  
IP Pool Ending Address 192 . 168 . 11 . 254  
Lease Time One day

The set values are effective after the system reset.  
Before the system reset, please backup the system data to the storage memory.  
You can use the System Reset feature in the System Control menu.

OK キャンセル



**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
July 28, 2016	Chapter 3 & 4	Page was sorted. Some pages were moved to step by step guide No.4.
	Chapter 5	GUI for programing was added.
	Chapter 6	Chapter 6 was moved to 56 and 57 in chapter 5.
	All	First official release
August 8, 2016	33 (Page 26)	<Apply> is required for any programming.
	34 (Page 27)	Example was revised.
	56 (Page 40)	Example of IP address was revised.
	58 (Page 42)	Explanation to change IP address was added.