X16^{plus} & X16plus-HYBRID

Administration Manual

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

The Ringer Equivalence Number (REN) indicates the maximum number of devices allowed to be connected to a telephone interface. The termination of an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices not exceed five.

L'indice d'équivalence de la sonnerie (IES) sert à indiquer le nombre maximal de dispositifs qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme des IES de tous les dispositifs n'excède pas cinq.

Warning:

1. Power cord shall be connected to a socket-outlet with earthing connection.
2. To reduce the risk of fire, use only 26 AWG or larger (e.g., 24 AWG) UL listed or CSA Certified Telecommunication Line Cord for all telecommunication circuits.
3. The external music source signal power must be less than 1 Vrms (0 dBv)

Revision and Amendment Records

Revision #	Description	Date
1.0.0	1. Release the first revision	Oct. 25, 2021
1.0.1	1. Remove ATA 2. Add Auto Attendant function at 3.1 3. Change to be X16plus	Nov. 8, 2021
1.0.2	1. Add EKT/PSTN & IP Phone/Trunk Diagnostic 2. Add Mail Server Configuration 3. Add Voice Mail 4. EKT copy add source number show in web 5.1.1	Dec. 2, 2021
1.0.3	1. Auto Provision 3.2 2. Add IP Trunk 3.15 3. Voice Mail Personal Greeting 3.17 4. Call Forward 4.2	Jan. 14 2022
1.0.4	1. Add Waring Message for Power Cord usage. 2. FXO number 741~746 and IP trunk number 751 ~758	Mar. 04, 2022
1.0.5	1. Add Waring Message for external music source signal level.	Mar. 17, 2022
1.0.6	1. Add Waring Message for cable.	Mar. 28, 2022
1.0.7	1. Modified 3.1 Auto Attendant note 2. Auto Provision 3.2 add auto number distribution. 3. 4.2 Call forward add forward number. 4. 5.4.5 answer position add destination. 5. 5.4.10 UCD setting change to Ring Group setting	Apr. 8, 2022
1.1.0	1. Add Customer Information Statement and more warning message.	Apr. 15, 2022
1.1.1	1. Add Wall Mount Installation.	Apr. 20, 2022
1.1.2	1. Add 3.12 Dial Out Number Plan 2. Add factory default when updating software	Apr. 22, 2022
1.1.3	1. Modified Automatic Upgrade in 5.5. 2. Modified WAN IP phone Auto Provision. 3. Modified XD10 phone book. 4. Add VAA Single Digit Menu in 3.18 5. Add Call log in 4.3 6. Modify 4.4 Caller ID list 7. Add retrieve or clean web password in 5.1 8. Add web logout in 5.1 9. Manual Upgrade Use XD10 extension in 5.5	Sep. 14, 2022
1.2.0	1. Transfer calls to a voicemail 2. Visual Message Waiting Indicator 3. VAA Voice File	Nov. 17, 2022

	4. XD10 12/24 - hour mode F#5 5. Change MAX Record Duration Time to 10 minutes 6. Add dial by name in auto attendant	
1.2.1	1. Add SSL and test key in 5.6.2 mail server 2. Unlock IP phone password	Jan. 12, 2023
1.2.2	1. Added virtual mailbox 2. IP phone number change to 201~216 3. VAA Single Digit Menu add check voicemail	Mar. 03, 2023
1.2.3	1. Re-record Greeting from IP Phone and XD10 in 3.1 2. Add Block Call List in 3.5	Mar. 23, 2023

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1. Introduction

Xblue X16plus system which has rich feature set of IP PBX telephone system and IP networking system. It has business essential PBX features such as an auto-attendant, voice mail, multi- line appearances, 16-way call conferencing, intercom, music on hold, call-forwarding and much more. The X16plus system opens up access to the benefits of VoIP, including lower cost long distance service, and one network for both voice and data.

The X16plus is so easy to configure that a fully working system can be set up in minutes. Plug and Play feature allows IP phone to be automatically detected and registered when they are connected. The X16plus is so easy to be managed and configured by its integrated web server.

1.1 Interfaces

- WAN Interface: one 10/100 Base-T Ethernet port
- LAN Interface: one 10/100 Base-T Ethernet port
- Digital Device Interface: 16 EKT (8 EKT + 8EKT)
- CO Interface: 6 FXO (4 FXO + 2 FXO) for PSTN
- Power Fail CO backup: 1
- Page Out: 1
- MOH: 1

1.2 Terminals

- 16 Digital Extensions
- 16 IP Stations
- 6 ~ 8 IP Trunk (Need SIP server)

Basically, the Administration is required to do the following things:

- To understand the architecture, resources, and devices of whole environment which will be involved with the VoIP communications.
- To build a common setting file for most users.
- To configure each interface and install them into X16plus.
- And to solve the problems that users encounter during operation.

2. Getting to Know the X16plus

Panel of X16plus

The panel contains the ports for the X16plus's data and power connections.

Label	Function
W	RJ-45 connector: Connects to a Cable, FTTH, or DLS devices.
L	RJ-45 connector: Connects to data switch for more IP devices.
Telephone Lines (L1-L6)	RJ-11 connector: Connects the device to your PSTN lines.
Power Outage	RJ-11 connector: Connects the analog phone to PSTN line 1 when power outage.
Xblue Digital Phone Ports (1-16)	RJ-11 connector: Connects the device to your XBLUE Digital Phones XD10.
Power	Connects to the supplied power converter cable.
External Paging output	3.5mm phone jack: Connects the device to speaker
Hold Music	3.5mm phone jack: Connects the device to music player
Reset	Reset the device (push) or Reset to default setting (push for 4 seconds).
CPU	Heart beat LED with Blue color

3. X16plus System Features

3.1 Auto Attendant

The X16plus Auto Attendant can greatly enhance business productivity by providing either a full-time automated attendant to handle all incoming system calls or part-time automated attendant to handle overflow traffic.

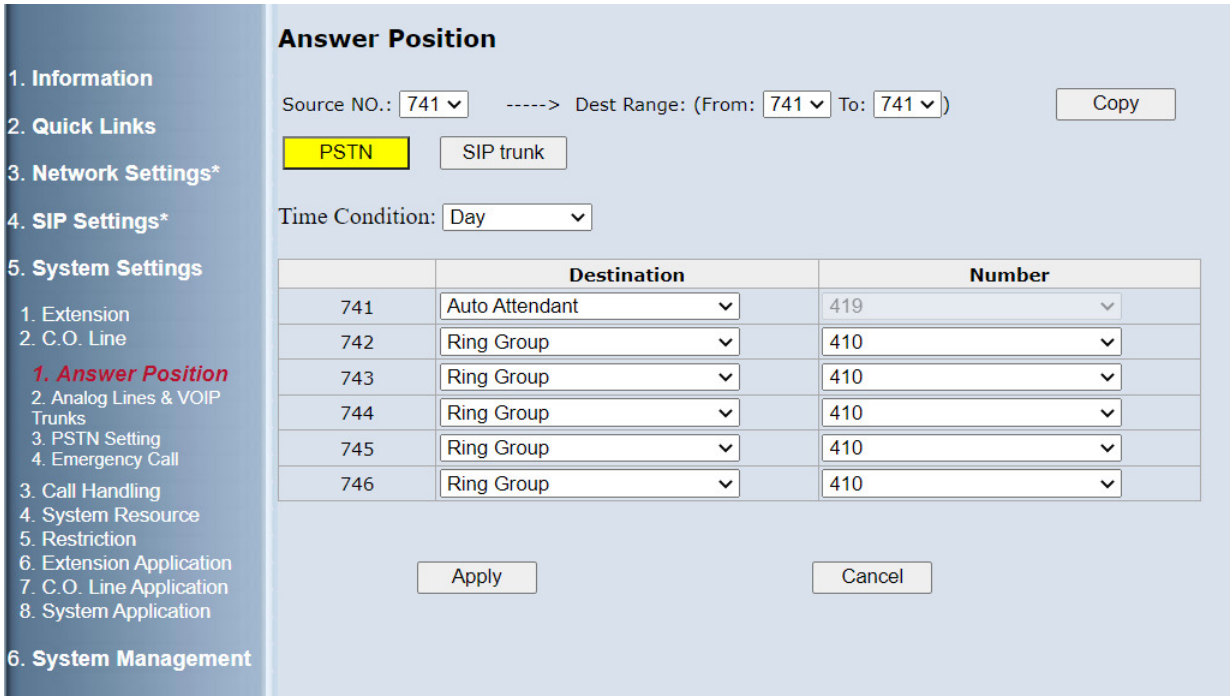
- **Auto Attendant Service**

  The Auto Attendant provides an incoming caller with a customized welcome greeting and specific prompts that will describe the options available to the caller.

  - Play the welcome greeting messages depending on the system service mode: Day, Night and time. Set the system service mode in web 5.8.3.
  - X16plus provides 6 Auto Attendant members (890~895) to pick up incoming call at the same time. Press "419" to enter Auto Attendant.

- **Enable Auto Attendant Line**

  Set the Answer Position for every line in web 5.2.1. Destination set to Auto Attendant (419). The VAA will answer the incoming line call at the time Condition.



Web 5.2.1 Answer position

- **Note:**
  - PSTN trunk 741 incoming call, VAA will answer the incoming call at day time.
  - Outside user dials an extension number. If the extension does not answer, when timeout (web 5.3.1 Transfer Recall Timer 30s) this call will be transferred to the Voice mail to leave a message.

- **Record Auto Attendant by XD10 phone**

Digital extension presses "Feature # 0" LCD show:

Check	Password

```
P S W D      :
 b k s p  s h o w  c h g
   F 1      F 2      F 3
```

Input "9999", press "F2" show.

1.	Service mode
Range:	DAY/NIGHT/TIME

```
 S V C   MOD E    CHANGE
 b a c k  n e x t  s h o w
   F 1      F 2      F 3
```

Press "F2" next show VAA and MOH music.

2.	Record VAA/MOH

```
 VAA  MSG & MUSIC
  b a c k  n e x t  s h o w
    F 1      F 2      F 3
```

Press "F2" show to record auto attendant message or press "F3" next to record MOH.

2.1.	Record VAA

```
AUTO_A  MESSAGE
 b a c k  n e x t  s h o w
   F 1      F 2      F 3
```

Press "F2" show to record day greeting.

2.1.1	Day Greeting
ID	10001

```
1.DAY  GREETING
r e c o r d  p l a y  n e x t
   F 1      F 2      F 3
```

Press "F3" next to record noon greeting.

2.1.2	Noon Greeting
ID	10010

```
2.NOON GREETING
r e c o r d  p l a y  n e x t
   F 1      F 2      F 3
```

Press "F3" next to record night greeting.

2.1.3	Night Greeting
ID	10011

```
3. NIGHT GREETING
r e c o r d  p l a y  n e x t
   F 1      F 2      F 3
```

Press "F3" next to record bye message.

2.1.4	Bye message
ID	10104

```
4. BYE  MSG
r e c o r d  p l a y  n e x t
   F 1      F 2      F 3
```

Press "F3" next to record invalid message.

2.1.5	Invalid message
ID	10106

```
5.INVALID  MSG
r e c o r d  p l a y  n e x t
   F 1      F 2      F 3
```

Press "F3" next to record waiting message.

2.1.6	Waiting message
ID	10201

```
6. WAITING  MSG
record  play  next
  F1     F2     F3
```

Press "F3" next to record busy message.

2.1.7	Waiting message
ID	10205

```
7. BUSY  MSG
record  play  next
  F1     F2     F3
```

Press "F3" next to record busy message.

2.1.8	No answer message
ID	10206

```
8. NO_ANS  MSG
record  play  next
  F1     F2     F3
```

Press "F3" next to record transfer to operator message.

2.1.9	Ring operator
ID	10102

```
9. TRANSFER TO OP
record  play  next
  F1     F2     F3
```

Press "F3" next to record temp message.

2.1.10	Temp message
ID	10013

```
10. TEMP  MSG.
record  play  next
  F1     F2     F3
```

Press "F3" next to record temp message.

2.1.11	Morning call
ID	10014

```
11.M.  CALL  MSG.
record  play  next
  F1     F2     F3
```

Press "hold" return to auto attendant message. Press "F2" next to record MOH music.

2.2	Recorod MOH
ID	11111

```
MOH   MUSIC
record  play  next
  F1     F2     F3
```

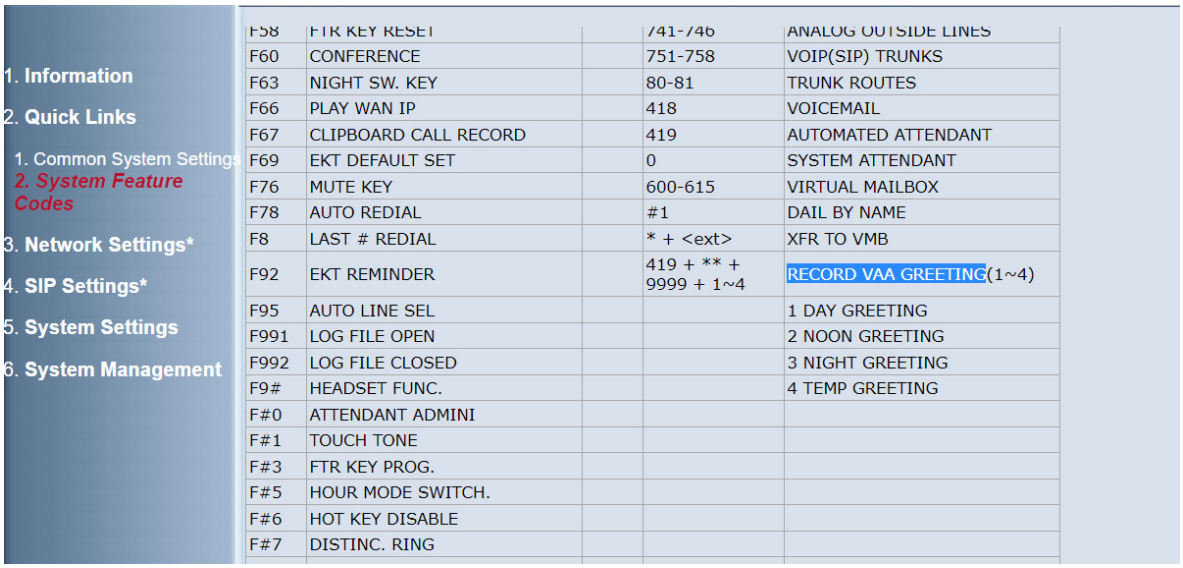
- **Note：**
  - Recording MOH music need connect music source with "Hold Music" in the X16plus panel.
  - The default temp message is Null, need record it. If enable VAA TEMP. MODE to "Y" in web 5.8.3, trunk incoming greeting will play temp message.

- **Record Auto Attendant by IP phone**

User can record auto attendant by IP phone, XD10 phone and incoming trunk to VAA.

- IP phone or XD10 EKT presses "419" to enter Auto Attendant.
- When auto attendant is playing greeting, press record code "**" to input operator password (default: "9999")
- After that input one digit number (1~4) to record VAA Greeting.
  1. Day greeting
  2. Noon greeting
  3. Night greeting
  4. Temp greeting

Web 2.2 System Feature Codes will show how to use this feature.



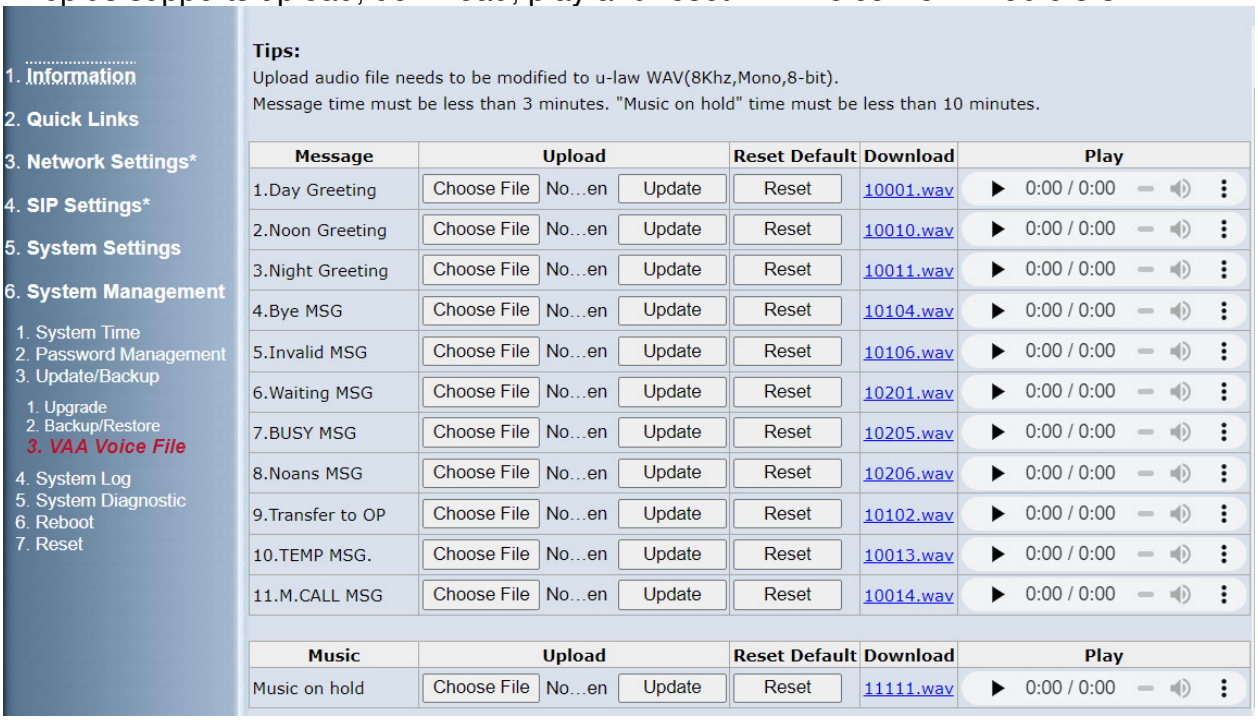
Web 2.2 System Feature Codes

- **Auto Attendant default voice**

Name ID	Default Voice
Day Greeting (10001)	Hello, your call has been answered by the Voice Processing System. This system can quickly get your call to the extension that you wish. You may dial that extension now, or press 0 (zero) for the attendant.
Noon Greeting (10010)	Hello, your call has been answered by the Voice Processing System. This system can quickly get your call to the extension that you wish. You may dial that extension now, Or you may press 0 (zero) for the attendant.
Night Greeting (10011)	Hello, your call has been answered by the Voice Processing System. At this time our offices are closed. However this system can quickly get your call to the extension that you wish. You may dial that extension now, or press 0 (zero) for the attendant.
Bye MSG (10104)	Thank you, goodbye.
Invalid MSG (10106)	Your entry doesn't match any of the choices, please try again.
Waiting MSG (10201)	Please wait while we transfer your call.
BUSY MSG (10205)	That extension is busy. press start (*) to wait a moment for automatic retry.
Noans MSG (10206)	That extension does not answer, press start (*) to wait a moment for automatic retry.
transfer to operator(10102)	The operation that you have requested cannot be completed, please wait while your call is transferred to the attendant.
TEMP MSG. (10013)	Null.
M.CALL MSG. (10014)	Null.
MOH (11111)	Music.

- **VAA Voice file**

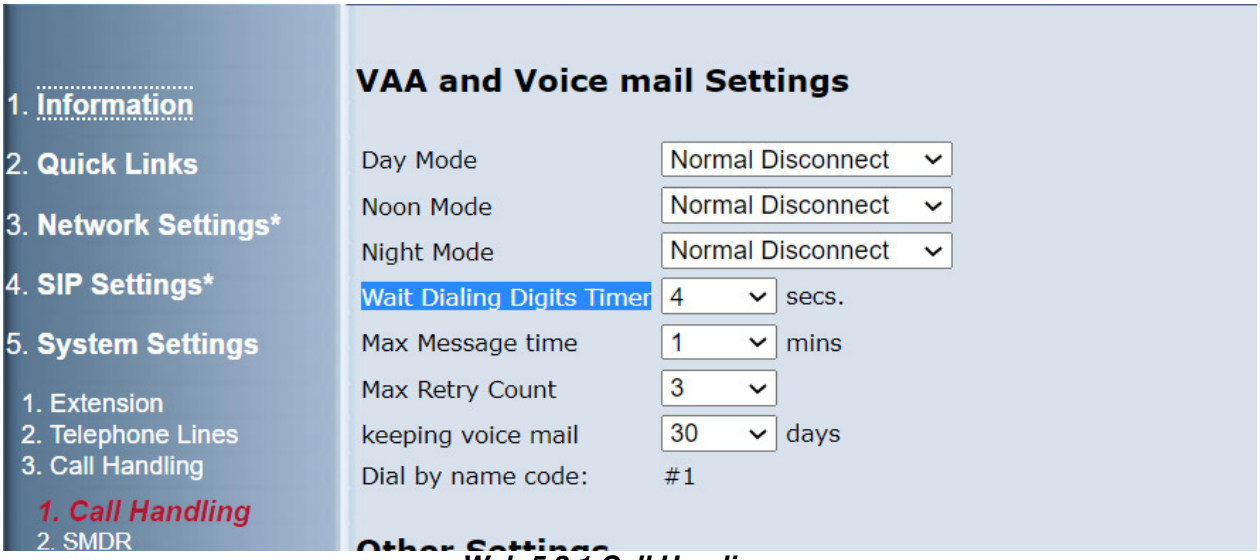
X16plus supports upload, download, play and reset VAA voice file in web 6.3.3.



Web 6.3.3 VAA Voice File

Name	Description
Tips:	**Voice File format** Upload audio file needs to be modified to u-law WAV (8Khz, Mono,8-bit). **Voice File Size** Message time must be less than 3 minutes. "Music on hold" time must be less than 10 minutes. **Convert Voice File**: Please enter the website "https://g711.org" to convert your file.
Message	Day Greeting, Noon Greeting, Night Greeting, Bye MSG, Invalid MSG, Waiting MSG, BUSY MSG, Noans MSG, transfer to operator, TEMP MSG., M.CALL MSG.
Music	Music on hold

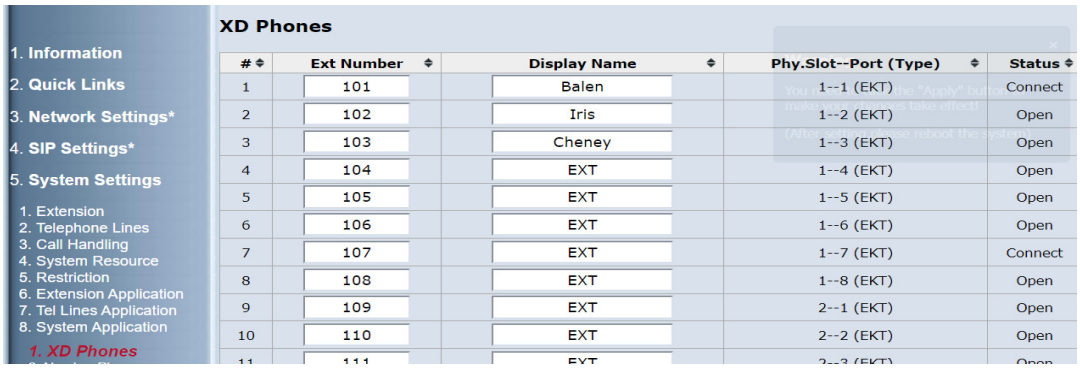
- **Other Auto Attendant settings**



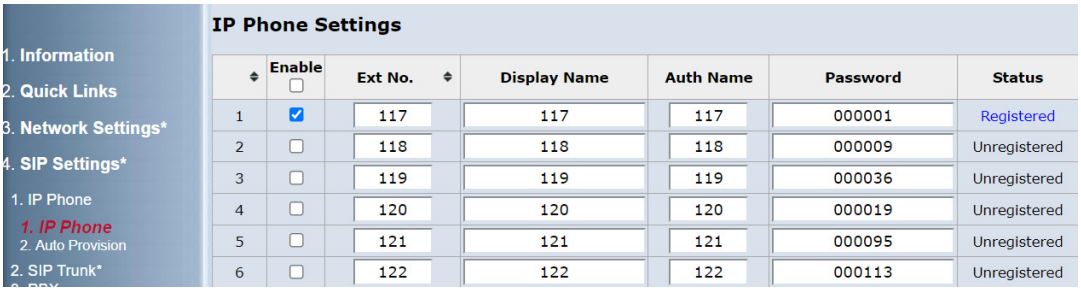
Web 5.3.1 Call Handing

Name	Description
Day/ Noon/ Night Mode	**Normal operator**: If incoming user do not dial any digits or receive error numbers, trunk call will transfer to operator. **Normal Disconnect**: If incoming user do not dial any digits, trunk call will be released. **Only play Greeting**: VAA only play greeting, after that trunk call will be released.
Wait Dialing Digits Timer	When VAA receive dialing digits time out, system will check the digits at the number plan.
Max Message time	Max time for Auto Attendant voice.
Max Retry Count	If receive error digits at the max time, this call will be released or transfer to operator.
Keeping voice mail	Voice mail keep time for every extension.
Dial by name code	When VAA receive dial by name code "#1", it will enter dial bye name process.

- **Dial by name**
  - Firstly, set name in EKT and IP phone web.



Web 5.8.1 XD Phones



Web 4.1.1 IP phone

  - Secondly, record name in voice mail.
    Press "voicemail key" → Press "password" → Press "5" to record name. → Press "2" user will hear "start recording after tone".

  - Finally, when auto attendant is playing greeting, press dial by name code "#1" to enter dial by name process.

In dial by name process, a voice prompt (Using the letters on the telephone keypad, dial the person's name and then press pound. For "q" press 7. For "z" press 9.) will be played to ask the caller to input the name. The dialed name will be finished when the caller presses “#” or stops the digit dialing in 10 seconds.

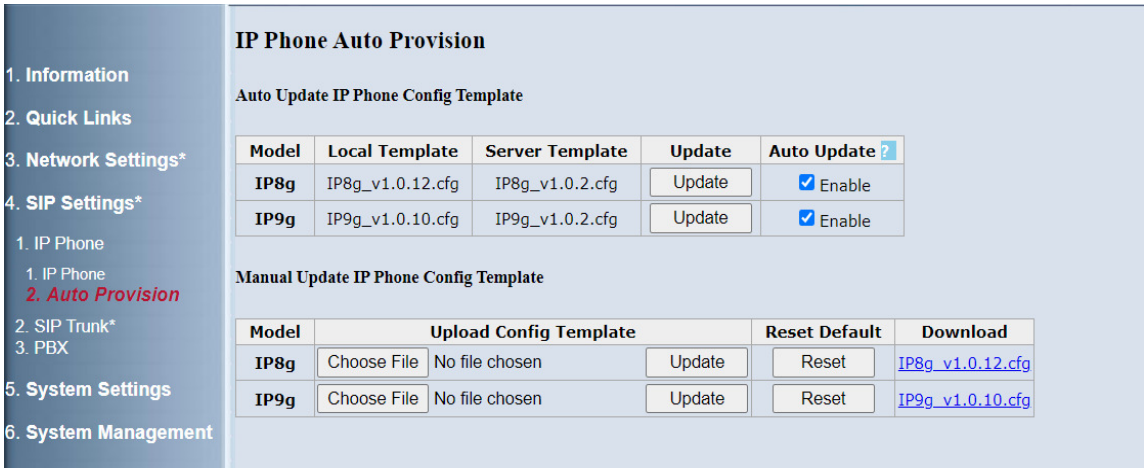
After the caller inputs the name, auto attendant compares the dialed name with these activated names. Then auto attendant starts to play the matched extension’s name file. If it matches two or more extensions’ names, these extensions’ name files will be played one by one following by the extension number. The interval between two name files is 10 seconds.

When hearing the matched name, the caller dials “1”. auto attendant will transfer the call to the extension of the matched name.

If it has no matched name or the caller doesn’t dial “1” after playing all of the matched name, auto attendant will play a warning message (I'm sorry, there are no matches for the name that you have entered), then play a voice prompt (To search for another name press 1. To exit and return to the main menu, press 2) to ask the caller to select the next operation. Press “1”, it will ask the caller to input a name again. Press 2, back to auto attendant greeting.

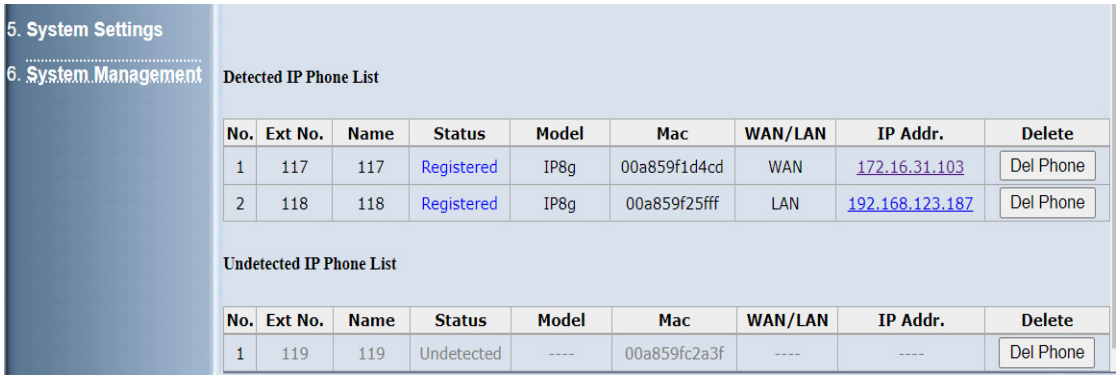
3.2 Auto Provision

- **IP phone config template update**
  - X16plus Auto Provision support auto update or manual update config template for IP8g or IP9g. If update success system will restart all IP8g and IP9g which were registered.
  - There are default configs for IP8g and IP9g in X16plus system. If upload error config, user can reset it to default.



Web 4.1.2-1 Auto Provision

- **Auto Provision Service**
  - X16plus provides Auto Provision service for IP Phone such as IP8g and IP9g connect in X16plus LAN side or WAN side under the same router.



Web 4.1.2-2 Auto Provision

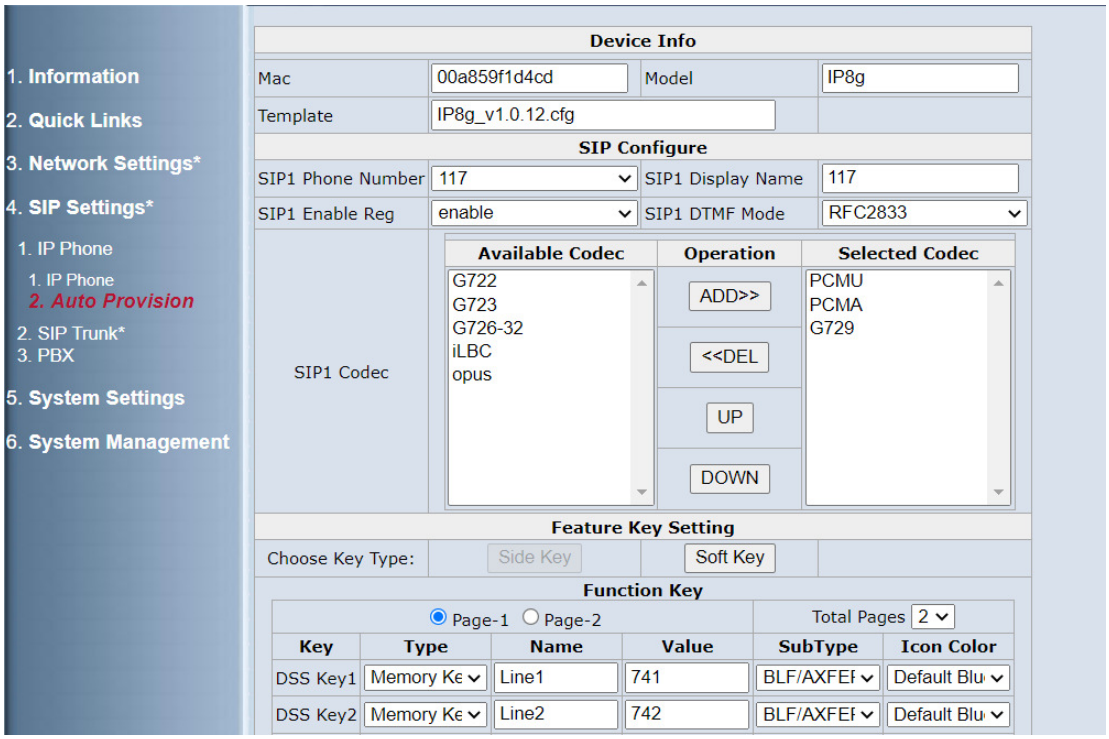
- **Note：**
  - Detected IP phone means X16plus system received the broadcast packet from the IP Phone and then X16plus will wait this IP phone to get the config file to register.
  - Click the IP address will link to the web of IP phone.
  - Undetected IP phone means X16plus used to receive the broadcast packet from the IP phone. User will check this IP phone or reset it.
  - Del Config will remove the IP phone config file in the X16plus system.

- **Auto Provision Operation**
  - Distribute IP phone automatic.

    When the X16plus system is running, connect the IP8g / IP9g into the LAN port or WAN side under the same router and restart the IP phone. The IP phone will occupy an idle number which is not used in web 4.1.1 and register to the SIP server automatic.

  - Set IP phone manually.

    Set the IP Phone by click one row of detected IP phone list. Then the IP Phone configuration web will be shown as following.



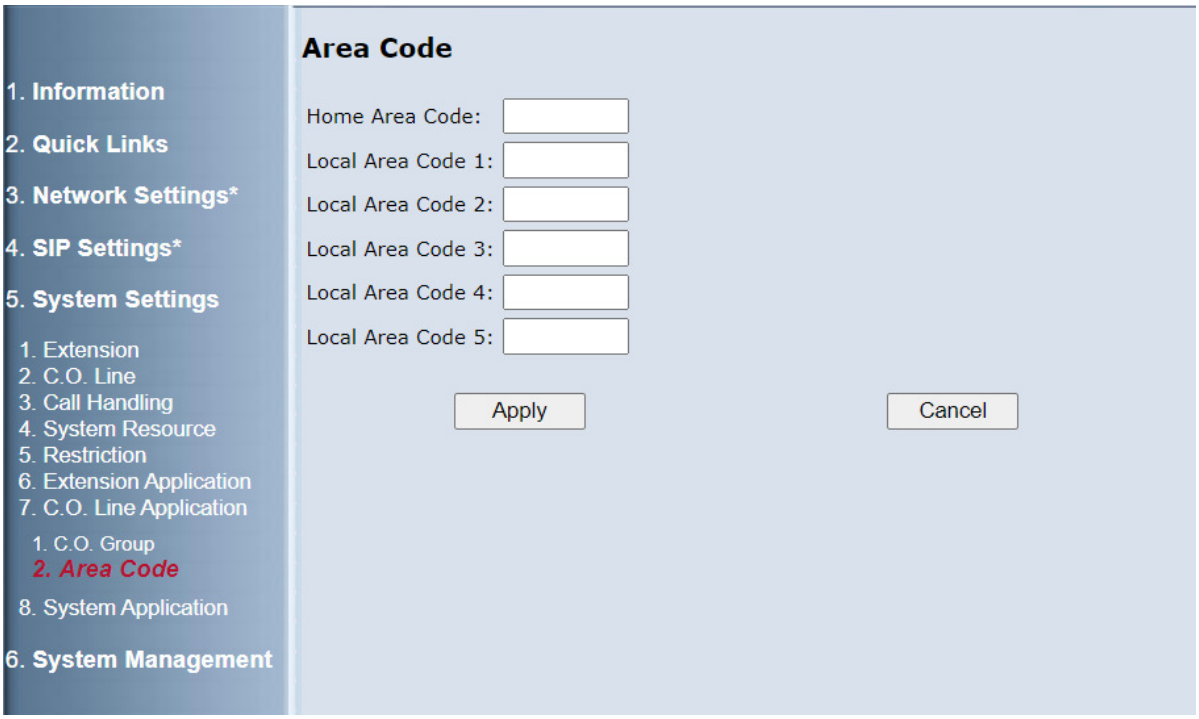
Web 4.1.2-3 Auto Provision

Set SIP1 phone number and DSS key. When configure finished, click Apply button to save the configuration for this IP Phone.

- **Note：**
  - WAN IP phone in the remote internet need set register server and port manually.

3.3 Area Code

X16plus provides 1 home area code and 5 local area codes which are programmable in web 5.7.2



Web 5.7.2 Area Code

- **Home and Local Area Codes**

Name	Description
Home Area Code	Program Home Area Code (1~3 digits)
Local Area Code 1	Program Local Area Code 1 (1~3 digits)
Local Area Code 2	Program Local Area Code 2 (1~3 digits)
Local Area Code 3	Program Local Area Code 3 (1~3 digits)
Local Area Code 4	Program Local Area Code 4 (1~3 digits)
Local Area Code 5	Program Local Area Code 5 (1~3 digits)

- **Note：**
  - If the phone number came from your home area code (the one you programmed), the LCD only displays the phone number (without the area code).
  - If the phone number came from one of your local area codes (the ones you programmed), the LCD displays the phone number with the local area code prefixed.
  - About the other cases, please refer to the following table description.

Caller Number Length	User doesn't set Home/Local Area Code	User has set Home/Local Area Code
Length is 1 ~ 6, 8, and 9	No Change	No Change
Number is DDN	No Change	No Change
Length is 7	(1) Ringing mode: Show 7-digit. (2) Caller List Mode: Show 7-digit, and 8-digit for [Call Alternate]	(1) Ringing mode: Show 7-digit. (2) Caller List Mode: Show 7-digit, 8, 10, and 11-digit for [Call Alternate]. Note: Using Home Area Code
Length is equal to 10. And, the area code is different.	(1) Ringing mode: Plus extra-[1]. (2) Caller List Mode: Plus extra-[1]. Show 11-digit, 7, 8, and 10-digit for [Call Alternate]	(1) Ringing mode: Plus extra-[1]. (2) Caller List Mode: Plus extra-[1]. Show 11-digit, 7, 8, and 10-digit for [Call Alternate] Note: Using Caller Area Code
Length is equal to 10. And, it is the same as home area code.	N.A.	(1) Ringing mode: Show the last 7-digit (2) Caller List Mode: Show 7-digit, 8, 10, and 11-digit for [Call Alternate]. Note: Using Home Area Code
Length is equal to 10. And, it is the same as the one of the local area codes.	N.A.	(1) Ringing mode: Show the last 10-digit (2) Caller List Mode: Show 10-digit, and 11, 7, and 8-digit for [Call Alternate]. Note: Using Caller Area Code
Length is over 10	No Change	No Change

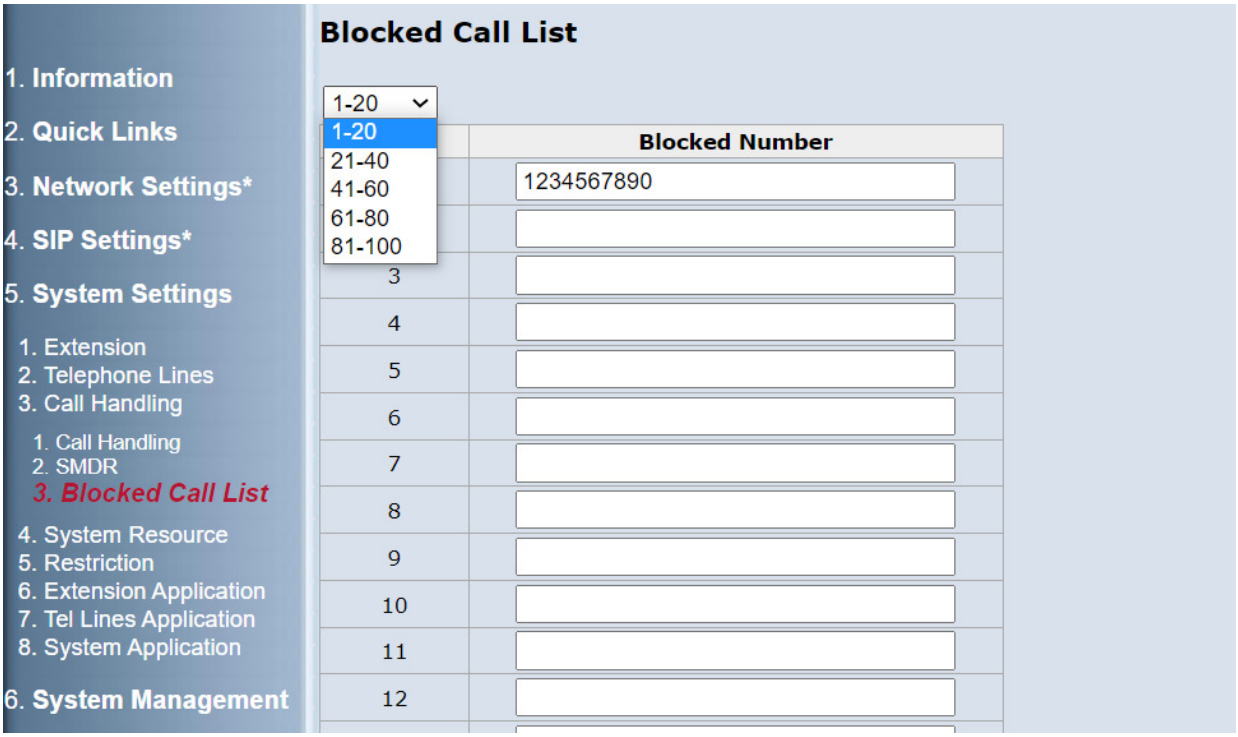
3.4 Basic Call

To make an intercom call, dial an extension number (EKT or IP phone).

To make an outside call, dial a PSTN, an IP Trunk or a Trunk Group number first. After hearing dial tone, dial the phone number.

3.5 Blocked Call List

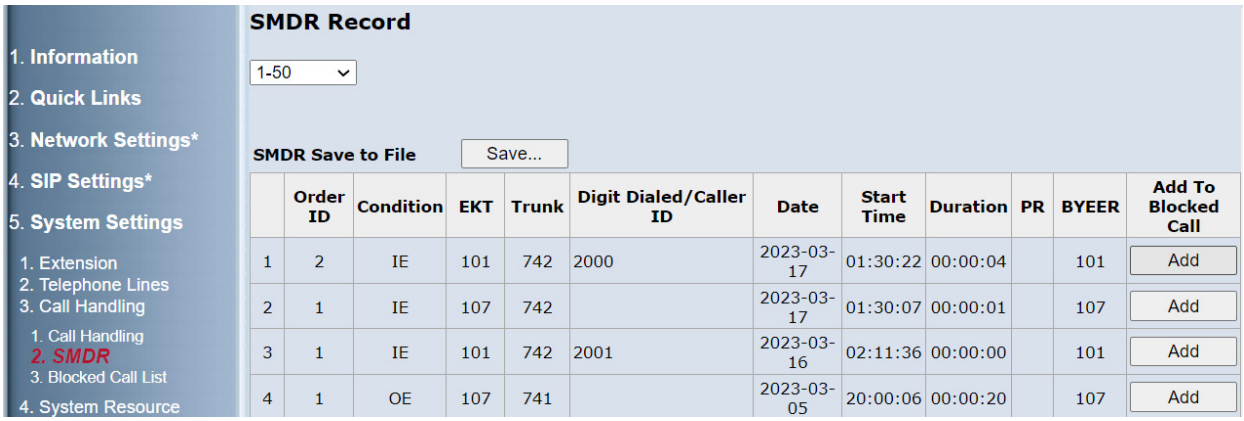
X16plus provides 100 blocked call numbers which can be set in web 5.3.3.



Web 5.3.3 Blocked Call List

Name	Description
No.	Item in blocked call list. The max blocked call items are 100.
Blocked Number	Blocked number which incoming CID will be blocked.

User can add block number by press add key in web 5.3.2 SMDR.



Web 5.3.2 SMDR

3.6 Call Abandon

For each PSTN call, X16plus provides the facility to monitor the call status. If the remote party hangs up, the ongoing call will be terminated.

The PSTN line monitor is accomplished through monitoring the Talk Abandon Time, polarity reversal or busy tone. The value range of Talk Abandon Time is: "Disable" 100/200/… / 3000 ms.

- Web 5.2.2 CO setting set Talk Abandon Time, Polarity reversal and busy tone.

3.7 Call Pickup – Group

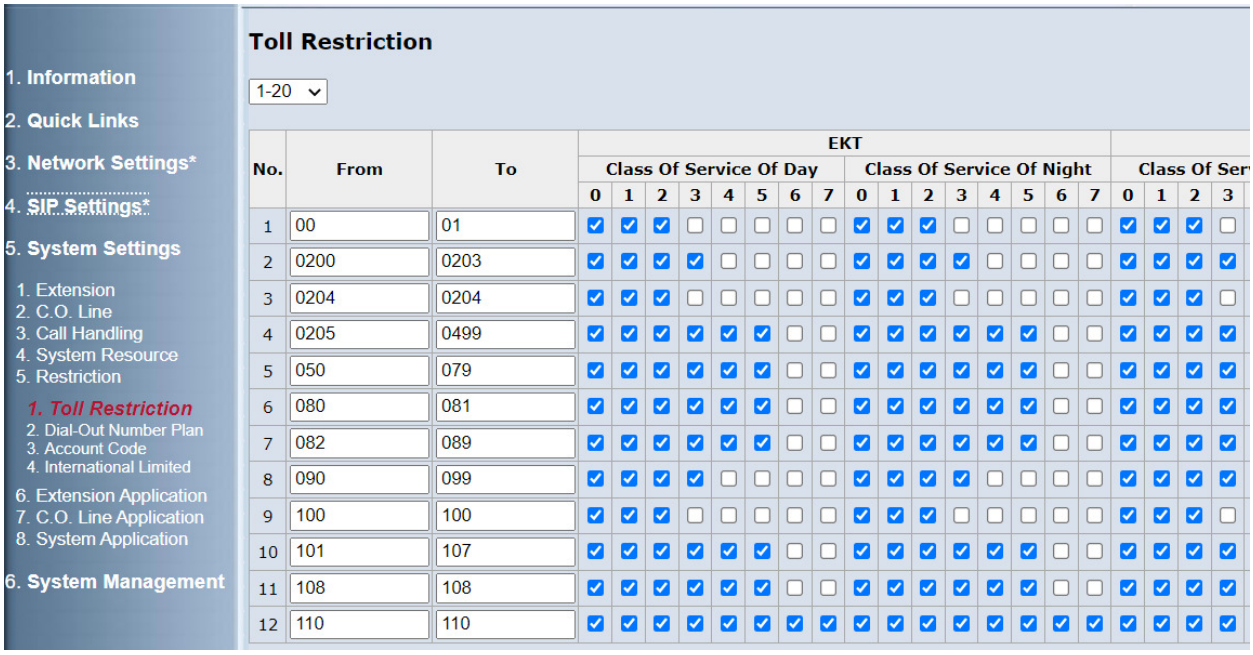
Each extension belongs to a Pickup Group (1~8). Direct Call Pickup allows extension users to answer a call that is ringing at other extensions. If dialing "*", allow you to easily access calls ringing in your group.

- Web 5.1.1 Ext Setting set extension Pickup Group.

3.8 Toll Restriction

X16plus provides sophisticated monitoring of digits dialed on PSTN/IP Trunks. If a digit or range of digits dialed on a Trunk line is inconsistent with the dialing extension's COS, the call will be. denied. This calling COS criteria can be applied to local calls, long distance calls, and specific numbers that are considered allowed in areas where other numbers may be restricted.

- X16plus allows configuring the Toll Restriction Table. It provides the following programming items in web 5.5.1.



Web 5.5.1 Toll Restriction

Name	Description
From / To	The intervals are made up of a "From" and "To" entry which establish a numeric range.

Name	Description
EKT COS Day / Night	EKT class of service for Day and Night, allow an extension with the COS or higher priority to dial the number(s) specified in that range.
C.O. COS Day / Night	C.O. class of service for Day and Night, allow a line with the COS or higher priority to dial the number(s) specified in that range.

- **Note：**
  - An entry of “From 1700”, “To 1800” would include the following range of numbers as the leading: 1700, 1701, 1702, …1799, 1800. Each From/To entry can be from 1 to 10 digits and may contain any digit 0 ~ 9. The “From” entry must be less than or equal to the “To” entry. Each From/To entry can be from 1 to 10 digits and may contain any digit 0 ~ 9, *, # .The “From” entry must be less than or equal to the “To” entry.

3.9 Caller ID Detection

X16plus provides the ability to detect the calling party identification provided by CO via PSTN lines or by Uplink Server via IP trunks. This data when received by the telephone carrier will be displayed on all ringing phones.

- Digital extension will show CID name first. Press soft key F1 CID name change to number. Press soft key F2 CID number change to name.

3.10 Class Of Service (COS)

X16plus provides 8 Classes of Service (COS) for assignment of outside line dialing-privileges. Each extension may be assigned one Day-COS and one Night-COS. The Extension COS is primarily used for restriction and control of long distance dialing. COS 0 is the highest priority. COS 7 is the lowest one.

- Web 5.1.1 Ext Setting set extension COS

3.11 16-Way Conference room

X16plus supports 4 conference rooms and up to 16 parties simultaneously. Each room can support 2 ~ 16 parties to join the conference call. If one of conference rooms already has 16 parties, the rest 3 conference rooms will not be used.

- **Note：**
  - Every participant dial "300~303" to enter conference room 1~4。
  - The first participant in the conference room will hear music on hold.

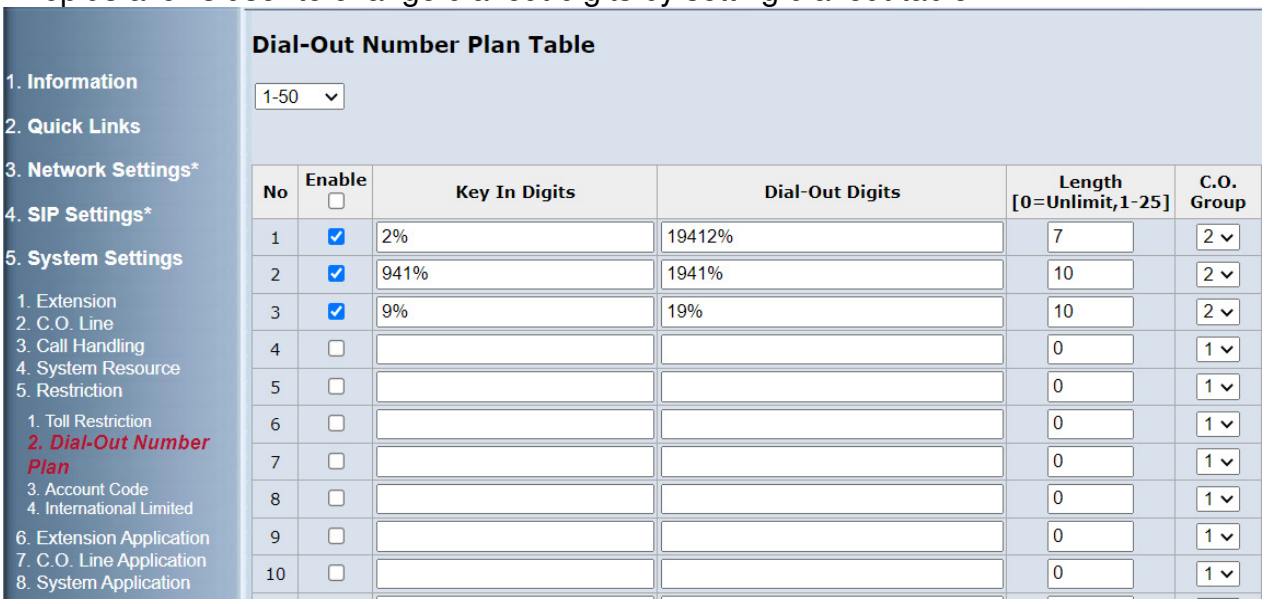
3.12 Daylight Saving Time

Daylight Saving Time (DST) feature supports auto adjustment for daylight saving time by Time Zone. It obeys the international standard rule.

- Web 6.1 system time set Time Zone.

3.13 Dial Out Number Plan

X16plus allows user to change dial out digits by setting dial out table.



Web 5.5.2 Dial out number plan table

Name	Description
Enable	Enable or disable this item in dial out table.
Key In Digits	Dian out digits. % means the follow digits.
Dial-out Digits	means send digits such as 19412664466.
Length	Length of dialing out digits.
C.O.Group	1. PSTN group, 2 IP trunk group.

- **Note：**
  - If user dials 9412664466, item 2 will match the key in digits and length. System will send 19412664466 to the IP trunk group.
  - If user dials 2664466, item 1 will match the key in digits and length. System will send 19412664466 to the IP trunk group.
  - If user dials 9xxxxxxxxx, item 3 will match the key in digits and length. System will send 19xxxxxxxxx to the IP trunk group.

3.14 Default Set

Clear all settings and return the X16plus config to the factory condition.

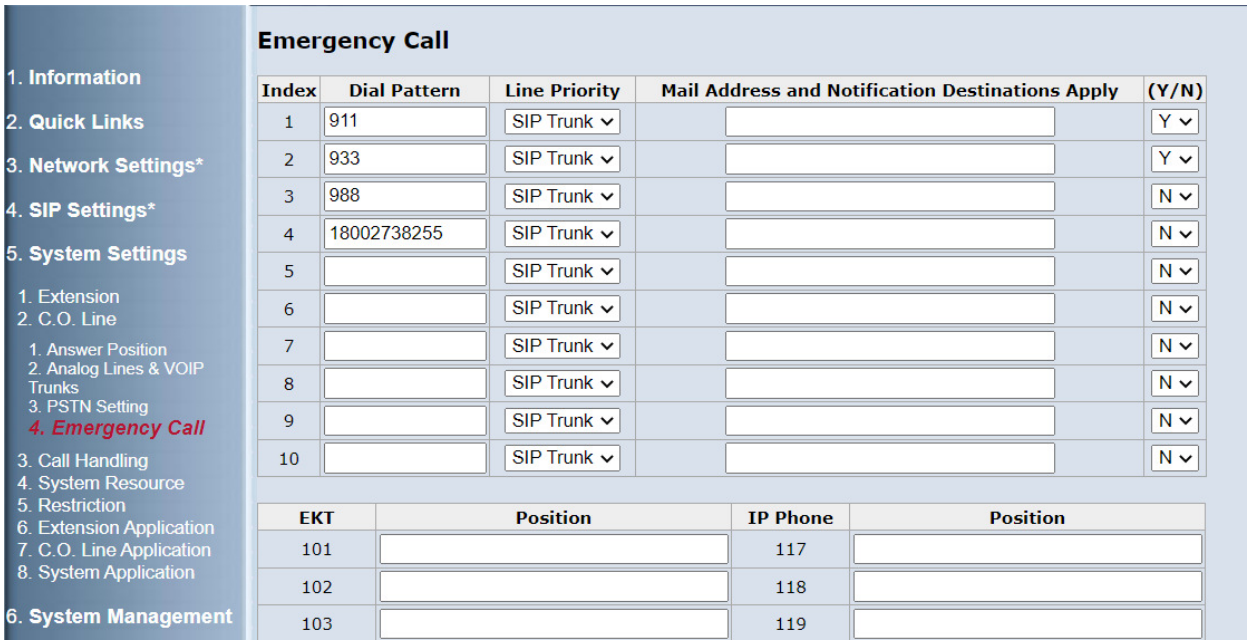
When rebooting the X16plus to the default, Wan IP and Lan IP will not change for the user to enter the web.

- Web 6.7 Reset set factory default.

3.15 Emergency Call

X16plus allows you configure ten Emergency Call numbers and lines with which Emergency Calls are sent out. Any user can make an Emergency Call regardless of its Call Routing table, Call Restriction, when they dial a pre-configured Emergency Call number. The numbers of Emergency Call must not collide with the numbers in Numbering Plan.

- Web 5.2.4 set Emergency Call.



Web 5.2.4 Emergency Call

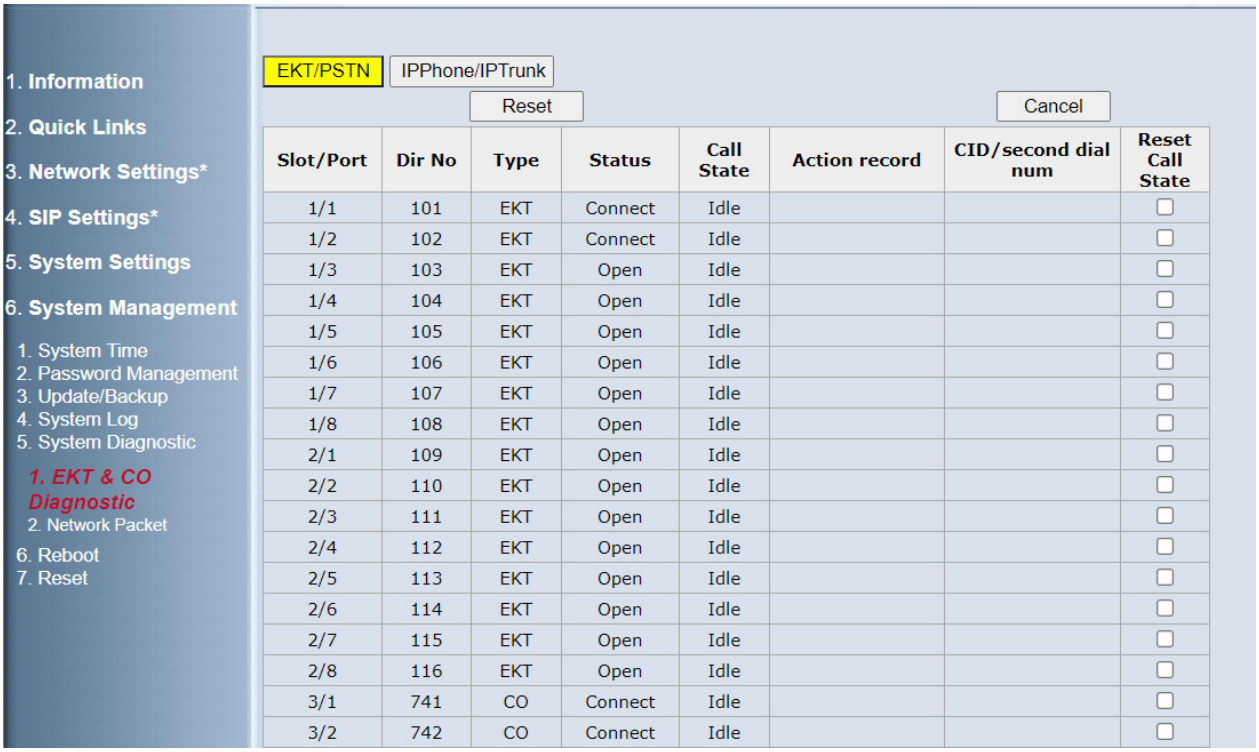
Name	Description
Dial Pattern	Enter emergency number.
Line Priority	Dial out emergency number with SIP trunk or PSTN first. If the first priority lines are all busy, X16plus will choose second priority line.
Mail Address	Email address for every emergency number. Send Email need set mail server in web 5.6.2.
Notification Destinations Apply	If Notification is set to "Y", system will send email to Email address when dial out emergency number. If Notification is set to "N", system will NOT send any message to others.

Name	Description
EKT Position	Enter EKT Position for emergency call

- **Note：**
  - If PSTN line or IP trunk are all busy, system will release one line to dial out emergency number.
  - If EKT dial out emergency number and Notification set to "Y", system will show EKT position on the operator EKT and send this position in IP trunk Display name.

3.16 EKT/PSTN & IPPhone/Trunk Diagnostic

Show EKT/PSTN and IP Phone / IP Trunk status. Record the latest call flow.



Slot/Port	Dir No	Type	Status	Call State	Action record	CID/second dial num	Reset Call State
1/1	101	EKT	Connect	Idle			☐
1/2	102	EKT	Connect	Idle			☐
1/3	103	EKT	Open	Idle			☐
1/4	104	EKT	Open	Idle			☐
1/5	105	EKT	Open	Idle			☐
1/6	106	EKT	Open	Idle			☐
1/7	107	EKT	Open	Idle			☐
1/8	108	EKT	Open	Idle			☐
2/1	109	EKT	Open	Idle			☐
2/2	110	EKT	Open	Idle			☐
2/3	111	EKT	Open	Idle			☐
2/4	112	EKT	Open	Idle			☐
2/5	113	EKT	Open	Idle			☐
2/6	114	EKT	Open	Idle			☐
2/7	115	EKT	Open	Idle			☐
2/8	116	EKT	Open	Idle			☐
3/1	741	CO	Connect	Idle			☐
3/2	742	CO	Connect	Idle			☐

Web 6.5.1 EKT/PSTN & IP Phone/Trunk Diagnostic

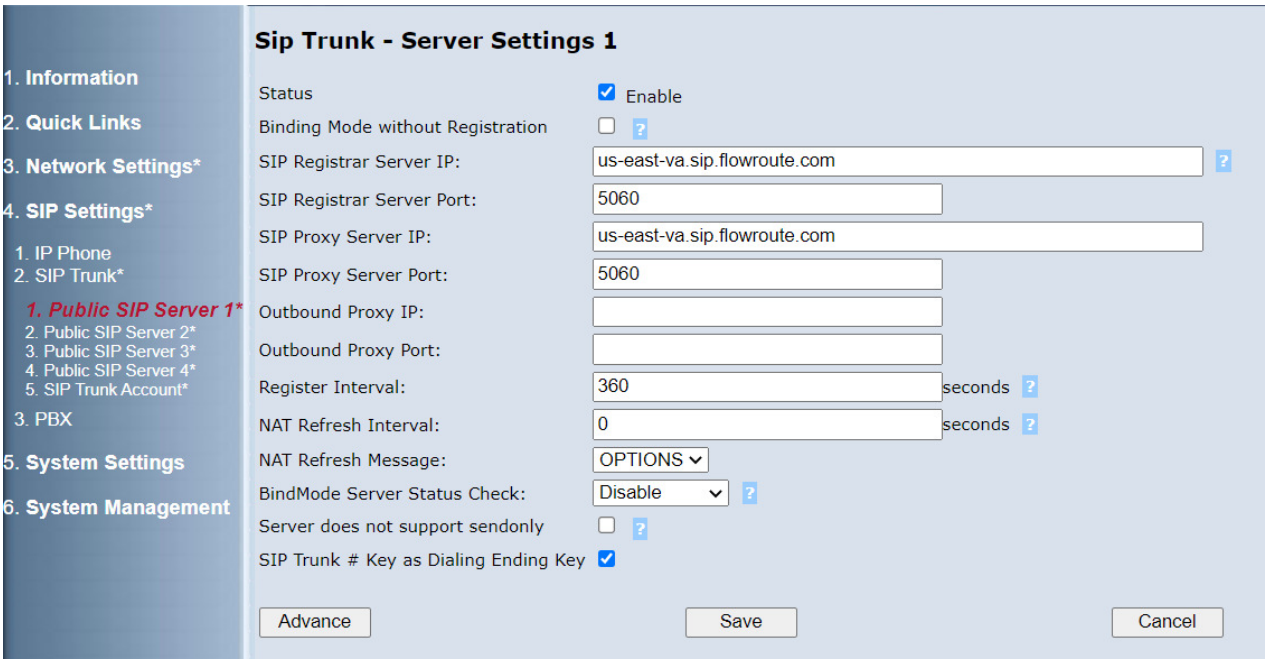
- **Note：**
  - If tick the reset call state item and press reset button, that call will be release immediately.
  - Action record can record the latest call flow even this call has been released.

3.17 IP Trunk

X16plus can register 6~8 IP trunk lines at 4 SIP Servers. The extensions may make a call to the users of the SIP Servers, or any user in the world through the SIP Servers.

Note: If user installs 6 PSTN Lines in X16plus system, X16plus will support 6 SIP Trunks only. The SIP Trunk 7 and 8 will be disabled automatically.

- **SIP server setting**

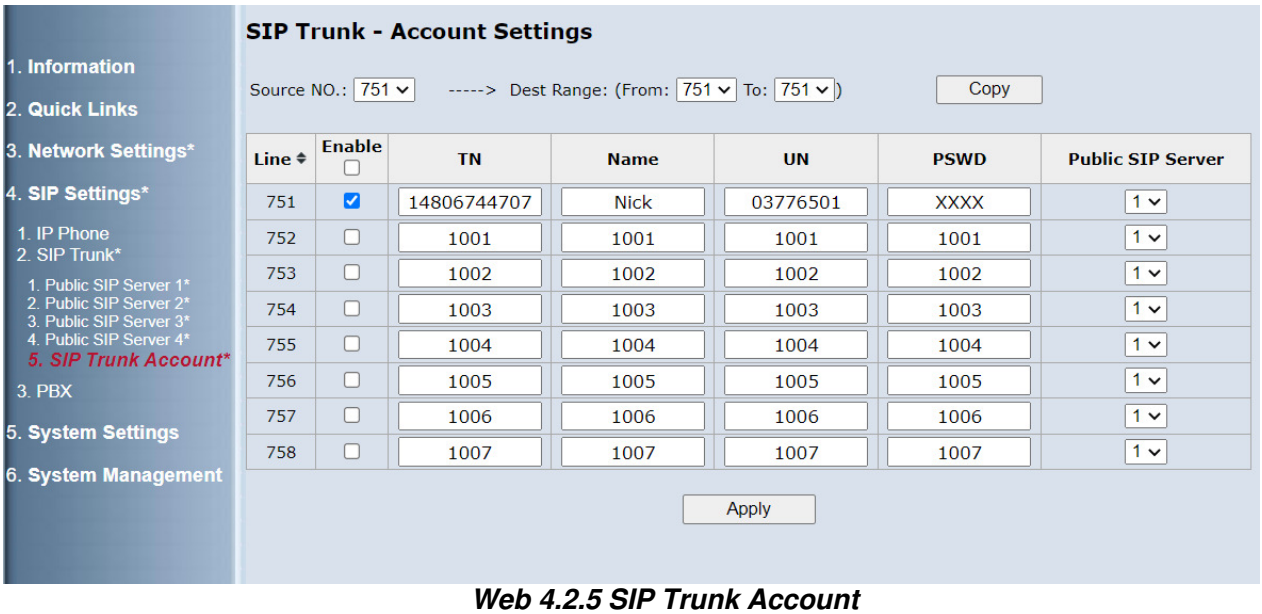


Web 4.2.1 Public SIP Server

Name	Description
SIP Server 1~4	X16plus support up to 4 SIP servers.
Status	Enable or Disable SIP server.
Binding Mode without Registration	In this mode, SIP Trunk will not register to SIP Server periodically. ITSP will bind CPE IP address and always provide SIP service to assigned CPE device.
SIP Registrar Server IP	SIP Registrar Server IP or domain.
SIP Registrar Server Port	SIP Registrar Server Port.
SIP Proxy Server IP	SIP Proxy Server IP or domain.
SIP Proxy Server Port	SIP Proxy Server Port.
Outbound Proxy IP	Outbound Proxy IP or domain.

Name	Description
Outbound Proxy Port	Outbound Proxy Port.
Register Interval	The timing value of register cycle.
NAT Refresh Interval	Used for some complicated ITSP network topology.
NAT Refresh Message	Message type SIP PING/OPTIONS/NOTIFY/UDP.
Bind Mode Server Status Check	CPE send NAT Refresh message to ITSP Server periodically to sync session status of each other.
Server does not support sendonly	This field is for ITSP Server compatibility. Please enable this item when ITSP Server does not support Send-Only SIP specification.
SIP Trunk # Key as Dialing Ending Key	# is a dial out digit or Ending Key.
Reinvite Resend flag	SIP trunk will re-send INVITE message when the call session is established.
IPT NAT Traversal	When ITSP SIP Server does not support CPE NAT Traversal, this field should be enabled and let system modify SIP signal to do NAT Traversal on CPE device.
Enable External Route IP	This field is used for resolving ITSP SIP Server compatibility issue.
External Route IP	External route IP address.
REFER mode for IPTtoIPT XFR	System will use REFER to implement IP trunk to IP trunk transfer when this field is enabled.
Short Number Display	System will use EKT number for outbound trunk calling number if it is enabled.
Trunk To Trunk Media Relay	This field control whether the media of IP trunk to IP trunk call relayed by CPE device.
Trunk CID Through to trunk	The outgoing trunk will send the incoming trunk CID when trunk to trunk status.
CID Delete Digit Lengths	CID Delete Digit Lengths.
CID Insert digit	CID Insert digit.

- **SIP Trunk setting**



Web 4.2.5 SIP Trunk Account

Name	Description
Source NO.	Copy source trunk.
Dest Range	Copy range (From trunk to trunk)
Copy	Copy Enable, Name , UN and PSWD except TN.
Line	IP trunk line number.
Enable	Enable this IP trunk.
TN	Telephone number.
Name	Display name.
UN	Auth number.
PSWD	Password.

3.18 Mail Server

X16plus mail server is used to send Email for Emergency call and Voice mail feature. It support Gmail、iCloud and Microsoft mail server.

Web 5.6.2 Mail Server

Name	Description
Server Type	Include common E-mail server. Help user to set the SMTP server address and port.
SMTP Server	Mail server address of the ISP
SMTP Server port	SMTP server port of the ISP
SSL:	Use Secure Socket Layer
Sender email addr.	The address of the email account
Sender user name	The login username of the mail account
Sender user password	The login password of the mail account

- **Note：**
  - When user choose a common Mail ISP as the server type, SMTP Server and the SMTP Server Port will be filled automatically.
  - User can choose the Server Type as "custom", and fill the SMTP Server and SMTP Server Port manually.
  - Different Mail ISP have various strategy of the SMTP service. User may need to consult the Mail ISP for detail information of how to set the SMTP server, port, username and password.

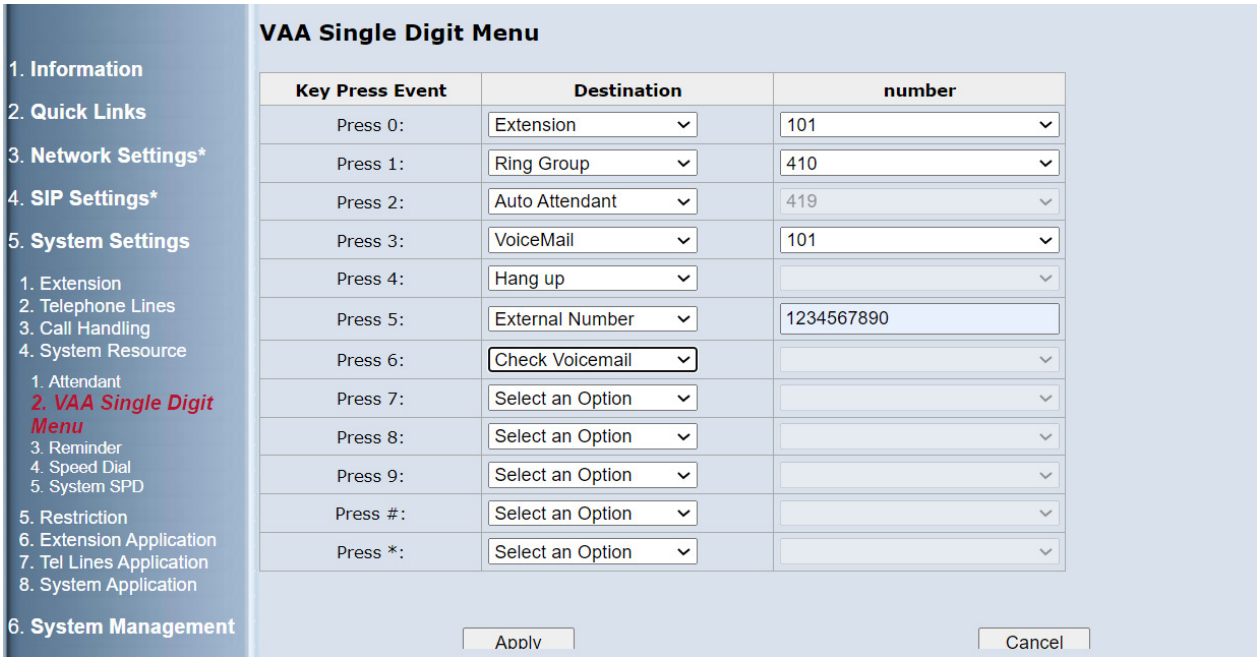
3.19 Transfer calls to a voicemail

If you want to transfer a line or internal call to the voice mail of extension 101, firstly press XFR key, then dial *101, finally press XFR key again.

If you want to leave message to the voice mail of extension 101 through an incoming VAA line call. Please dial *101 directly when the VAA answer the call.

3.20 VAA Single Digit Menu

When VAA is playing greeting, outside user dials first digit will be sent to VAA Single Digit Menu.



Web 5.4.2 VAA Single Digit Menu

Name	Description
Key Press Event	First digit receive 0-9 * #.
Destination Number	Select an Option (Null) Extension (101 – 132) Ring group (410 – 417) Auto Attendant (419) Voice Mail (101 – 132) Hang up External Number (1234567890) Check Vociemail

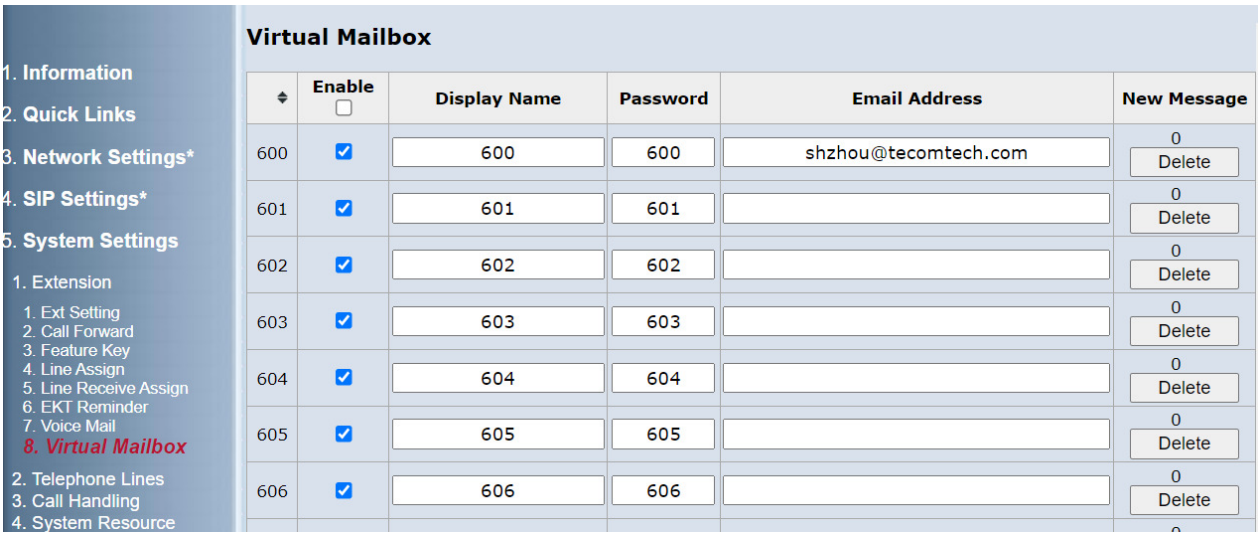
- **Note：**
  - If the first digit is not matched the option, it will be checked by number plan.

3.21 Virtual Mailbox

- **Virtual Mailbox Number Plan**

  There are 16 virtual mailboxes in X16plus system, the default number is 600~615. It can be changed in web 5.8.2 Number plan.

- **Enable Virtual Mailbox**



Web 5.1.7 Voice mail

Name	Description
Enable	Enable/Disable Virtual mailbox. Default is Enable.
Display name	Virtual Mailbox display name.
Password	Virtual Mailbox password, default is the same as display name. Max length is 6.
Email address	Send a notification via email when a new message is left.
New Message	Show and delete new messages.

- **Note：**
  - For each leaving message max message time is 1 ~ 3 mins. Default is 1 min. Set this item in Web 5.3.1 call handing - VAA and Voice mail Settings - Max Message time.
  - For each leaving message, it can be saved 1 - 60 days. Default is 30 days. Set this item in Web 5.3.1 call handing - VAA and Voice mail Settings - keeping voice mail.
  - The system can handle six simultaneous calls to leave messages.
  - For each extension the maximum number of Voice message is 99.
  - Send voice message as the attachment of the email in WAV format.

- **Set Virtual mailbox**
  - Set extension call forward to virtual mailbox in web 5.1.2.
  - Set trunk answer position to virtual mailbox in web 5.2.1.
  - Set UCD FailOver Destination to virtual mailbox in web 5.6.1.
  - Programming 600~615 in extension feature key.

- **Leave message to Virtual mailbox**

  When you leave a message to the virtual mailbox.
  - If you record personal greeting, play first.
  - Leave you message after the tone.
  - Save message.

    Case 1: Press "#" to end of recording. Press "1" to save this message.

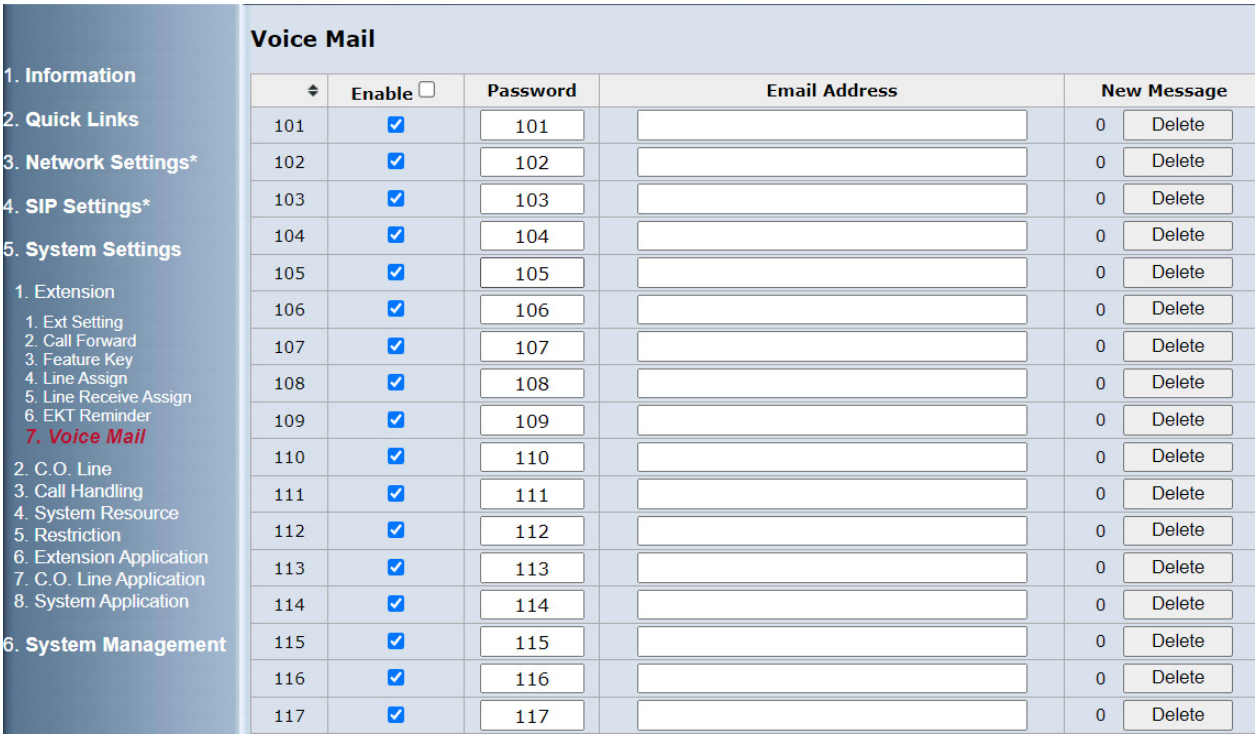
    Case 2: Simply hang up.
  - Programming key will be red show to indicate there is a new message.

- **Enter the mail box**
  - Press feature key (600~615) to enter virtual mailbox.
  - Press the virtual mailbox password to enter the mail box.

- **Enter the mail box**
  - Press feature key (600~615) to enter virtual mailbox.
  - Press the virtual mailbox password to enter the mail box.

3.22 Voice Mail

- **Enable extension voice mail**



Web 5.1.7 Voice mail

Name	Description
Enable	Extension Enable/Disable mail box. Default is Enable.
Password	Extension mail box password, default is extension number. Max length is 6.
Email address	Send a notification via email when a new message is left.
New Message	Show and delete new messages.

- **Note：**
  - For each leaving message max message time is 1 ~ 3 mins. Default is 1 min. Set this item in Web 5.3.1 call handing - VAA and Voice mail Settings - Max Message time.
  - For each leaving message, it can be saved 1 - 60 days. Default is 30 days. Set this item in Web 5.3.1 call handing - VAA and Voice mail Settings - keeping voice mail.
  - The system can handle six simultaneous calls to leave messages.
  - For each extension the maximum number of Voice message is 99.
  - Send voice message as the attachment of the email in WAV format.

- **Leave message to an extension**

  When the extension is busy or no answer, the trunk call will pick up by the voice mail, press "#" to leave a message to that extension.

  - If you record personal greeting, play first.
  - Leave you message after the tone.
  - Save message.

    Case 1: Press "#" to end of recording. Press "1" to save this message.

    Case 2: Simply hang up.
  - EKT will show new messages in LCD.

- **Extension Clipboard Recording**

  When the extension is talking with trunk or the other extension.

  Press [Feature] + "67" to invoke clipboard recording.

  - Trunk or the other extension will hear "Begin recording".
  - Press [Feature] + "67" again or hang up to stop recording.
  - Enter the mail box to listen to Clipboard Recordings.
  - The MAX record duration time is 10 minutes.

- **Enter the local mail box**

  The VM user can enter its own VM box through the following ways.

  - Press reply key "F2" in the LCD extension.
  - Press "Message" key in the LCD extension.
  - Press VM group code "418". IP phone or LCD extension.

  After that press the personal VM password to enter the mail box.

  The default VM password is the same as EKT number.

  - To listen to your messages, press 1.
  - To delete all message, press 2.
  - To record your personal greeting, press 3.
  - To change the password of this mailbox, press 4.
  - To listen to Clipboard Recordings, press *.
  - To exit, press #.

- **Check voicemail remotely**
  - Set VAA Single Digit Menu key 0 destination to check voicemail.
  - Make incoming trunk call to VAA and press 0.
  - Then you hear "Please dial the mail box number".

3.23 Visual Message Waiting Indicator

- If the X16plus get the VMWI signal from the PSTN line, the indication will be on the operator XD10 EKT. the LED on the top-right corner of operator XD10 will be flashed.
- The LCD on operator XD10 will show “MSG WAIT:L123456” (When all 6 PSTN Lines get message waiting) If some of PSTN Lines get message, it will show “MSG WAIT:L1 3 5” (for L1,3,5) or “MSG WAIT:L 2 4” (for L2, 4) or “MSG WAIT:L 6” (for Line 6)

M	**S**	**G**		**W**	**A**	**I**	**T**	**:**	**L**	**1**		**3**		**5**
E	**X**	**T**				**C**	**I**	**D**				**1**	**0**	**1**

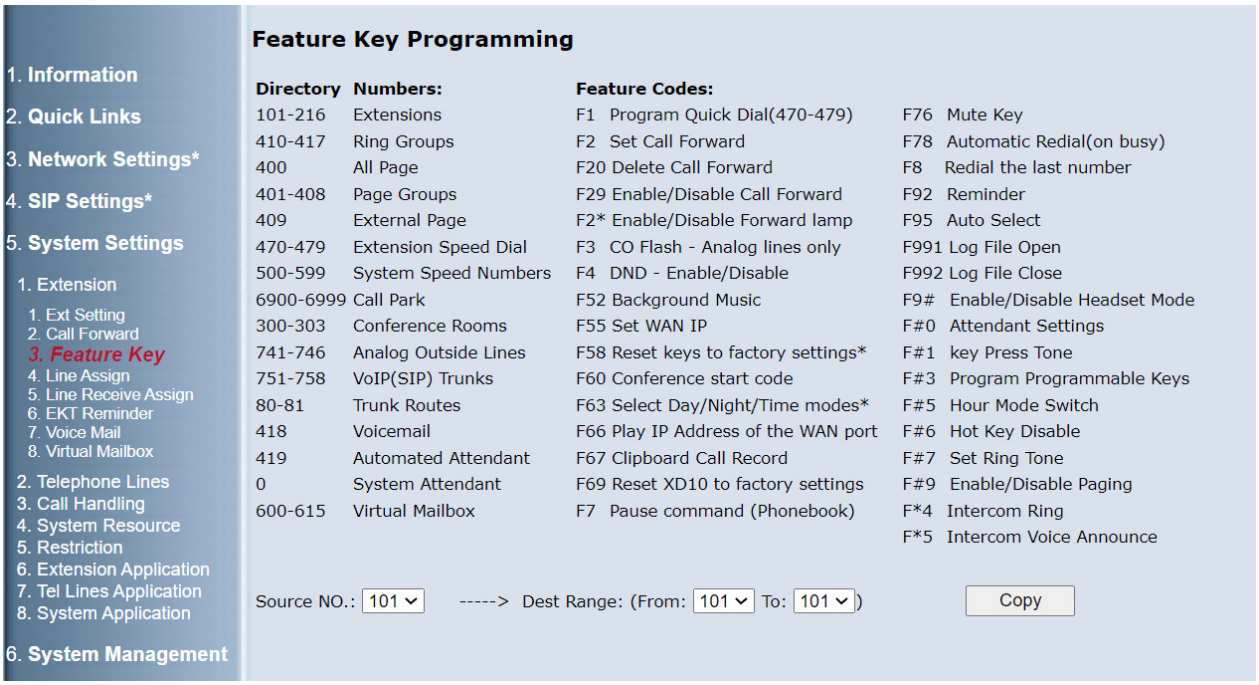
- When re-power on, all message waiting indication will be cleared.

4. X16plus Extension Features

X16plus Support XD10 digital extension, and IP Phone.

4.1 10 Programmable Keys

XD10 digital extension have 10 programmable keys set in web 5.1.3



Web 5.1.3 Feature key

Name	Description
Extension	Copy feature key source extension.
Source From NO.	Copy feature key from extension.
Dest To NO.	Copy feature key to extension.
Feature key	Each digital extension has 10 programmable keys.

- **Note：**
  - Each digital extension keys default set:
    key 1 ~ 4 : Line 1 ~ 4
    key 5 ~ 10: Extension 101 ~ 106
  - Feature key can be set by press "Feature # 3" on digital extension.

4.2 Call Forward

- **Description**

  There are some Call Forward choices:

  - "All" Forward all of your calls,
  - "Busy" Forward your calls when your telephone is busy.
  - "No Answer" Forward your calls in no answer conditions.
  - "External" Forward your calls to another location or different telephone number.
  - "Simultaneous" Forward your calls to another extension and your telephone will also ring at the same time.

  Forward conditions may be set as follows for each call forward type:

  - Intercom calls only or CO Line calls only.
  - Intercom and CO Line (including transferred CO Lines) calls.

  Forward number

  - Extension 101~216.
  - Ring Group 410~417
  - Voice mail 418
  - Auto Attendant 419
  - External telephone number
  - Virtual mailbox 600~615

- **Operation – Setup call forward**

  Extension press [Feature], then press 2, The display will show:

C	A	L	L		F	O	R	W	A	R	D
	a	l	l		b	u	s	y		n	e	x	t

  - All Call Forward

    1. Press soft key F1[all]. The display will show:

D	I	R	E	C	T			C	F	W	
	c	o			i	c	m	/	c	o			i	c	m

    Press F1[co] or F2[icm/co] or F3[icm] to select the forward conditions.

    Select the type of calls to forward.

    - co = CO Line incoming or transferred calls
    - icm/co = both intercom and CO Line calls
    - icm = intercom calls only.

    2. press F3 [chg] to input the directory extension 102 where calls are to be forwarded. Press [save].

D	I	R	E	C	T			C	F	W	:	1	0	2
b	k	s	p		s	a	v	e				c	h	g

Confirmation tone is heard, the extension returns to idle, the Auxiliary Lamp is lit red (F2* CFWD LAMP ON/OFF), and the display shows FWD in the middle of the bottom row.

Hook off the extension dial tone will be changed to special dial tone.

- Busy Call Forward

Press soft key F2[busy]. The LCD will show:

```
B U S Y        C F W
   c o      i c m / c o      i c m
```

Other is the same as all call forward.

- No Answer Call Forward

1. Press [next]. The display will show:

```
C A L L   F O R W A R D
n _ a n s   e x t     s m t
```

2. Press [n_ans]. The display will show:

```
N O _ A N S      C F W .
   c o      i c m / c o      i c m
```

3. After input forward type and number. Press [save]. Display will show:

```
N O _ A N S   T I M E     : 1 0
                          c h g
```

4.press [chg] to modify the no answer time

Then you can off the hook and hand up. Or press [HOLD] to return to previous level.

- External Call Forward

1. Press [next]. The display will show:

```
C A L L   F O R W A R D
n _ a n s   e x t     s m t
```

2. Press [ext]. The display will show:

```
E X T E R N A L      C F W .
   c o      i c m / c o      i c m
```

3. After input forward type, press [chg] to input the telephone number (cell phone, other office, etc.) where calls are to be forwarded.

1 3 4 7 0 8 1 8 1 6 5 _	
b k s p s a v e	c h g

4. Press [save]. The display will show

R O U T E D I R # : 1	
	c h g

Press [chg] to select the co route.
Then you can off the hook and hand up.

- Simultaneous Call Forward

1. Press [next]. The display will show:

C A L L F O R W A R D	
n _ a n s e x t s m t	

2. Press [smt]. The display will read:

Simultaneous
chg

3. press [chg] to input the extension number that will ring at the same time.

Simultaneous _	
bksp	save chg

4. Press [save]. The display will show

Simultaneous 102
chg

Then you can off the hook and hand up.

- IP phone set the Call Forward

IP phone can set call forward in the IP Phone UI or on its web.

- **Operation – Delete Forward**

Extension press [Feature], then press ‘2’ ‘0’ will delete call forward.

- **Operation – Disable or Enable CALL Forward.**

Extension press [Feature], then press ‘2’ ‘9’. The call forward setting will be disabled temporarily. Press [feature]+’2’ ‘9’ again will enable the call forward setting.

4.3 Call Log

- **Log dial out**

  X16plus can record max 50 trunk outgoing numbers.

  - Press navigation key “Up (dial out call log”)" to enter outgoing record.
  - Press navigation key “Up or Down" to find the number.

    ```
    O U T G O I N G        # 0 3
    1 8 2 4 0 0 6 7 9 2 2          >
    ```

  - Press navigation key "OK" to dial out.

    ```
    C O   L N   7 4 1
    1 8 2 4 0 0 6 7 9 2 2
    ```

- **Log call in**

  X16plus can record max 50 trunk incoming numbers.

  - Press navigation key “Down (Call in Log)" to enter outgoing record.

    ```
    A L L   C I D :   5 0
    N E W   C I D :   1 0
    ```

  - Press navigation key “Down” again to check the latest incoming call log.

    ```
    5 7 7 5 1 4 1              L 7 4 1
    J O H N   S M I T H            >
    ```

  - It is the same as press F2 soft key to enter caller ID list.

4.4 Caller ID List

- **Enter the Caller ID List Mode**
  - User can press F2 soft key to enter the caller ID list mode when EKT is idle.

D	E	C		2	6		S	U	N		2	0	:	4	0
E	X	T					C	I	D					1	0	1

- **Caller ID List Mode**
  - EKT LCD display as follow , Max caller ID number is 50.

A	L	L		C	I	D	:		5	0					
N	E	W		C	I	D	:		5	0					

  - In caller ID list mode, user can use OK key to delete all caller id items in the caller id list

D	e	l	e	t	e		A	l	l	?					
							y	e	s		n	o			

- **Browse Caller ID List**
  - When user press UP/DOWN key in the caller ID list mode, EKT will enter the caller ID list browser mode.

5	7	7	5	1	4	1								L	1
J	O	H	N		S	M	I	T	H						>

  - User press RIGHT key when browsing the caller ID list, EKT will show detail info of this caller ID item.

1	0	/	1	7		0	6	:	3	0	A	M		L	1
I	n	d	e	x	#	4	7			N	e	w			

- **Caller ID List Function Menu**
  - User can press OK key to enter the function menu when browsing caller ID list.

5	7	7	5	1	4	1								L	1
	d	i	a	l		s	a	v	e		d	e	l		

  - User can use F1~F3 soft keys to choose the Corresponding item.

- **Dial Alternate**
  - Dial alternate function will enable when user has programmed Home Area Code and Local Area Code.

1	-	1	2	3	4	5	6	7	8	9	0				
	b	a	c	k		d	i	a	l		c	h	g		

4.5 Call Pickup – Individual

You may pick up call for specific digital extension. The feature allows you to easily access calls ringing via the feature access code.

- Dial the EKT number who is ringing, you will hear busy tone normally. Press key "6" to pick up the ringing call.

4.6 Do Not Disturb (DND)

Extension users can enable DND to reject all incoming calls. The DND on an extension can be allowed or denied through the feature access code.

- To enable the Do Not Disturb feature, press "Feature 4".
- To disable the Do Not Disturb feature, press "Feature 4" again.

4.7 Hold Reminder

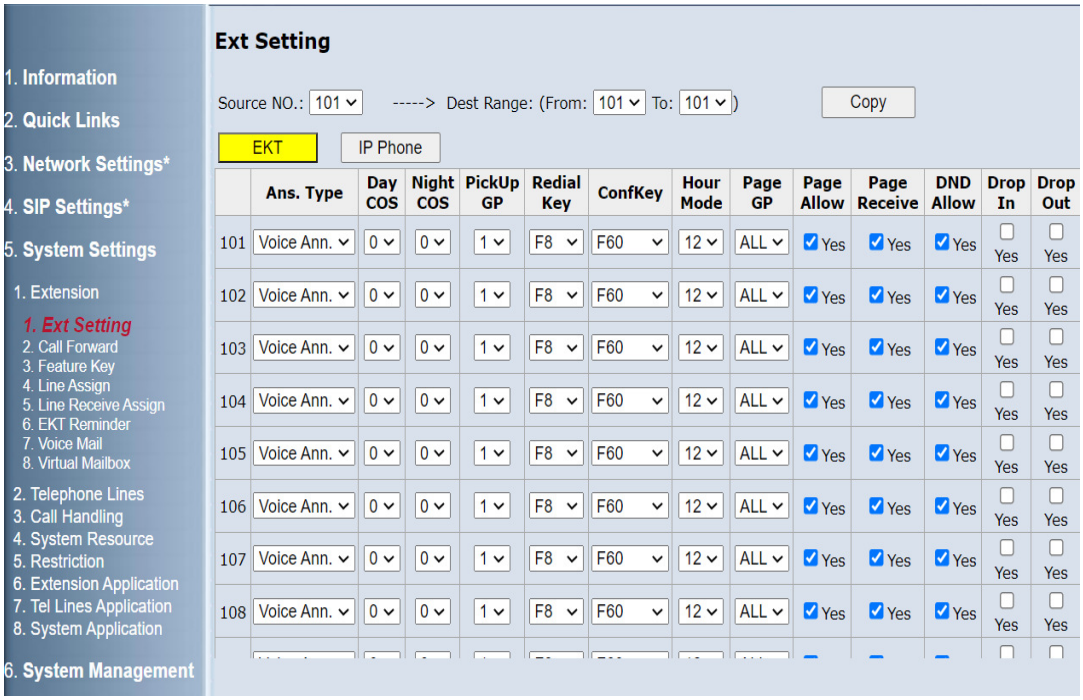
X16plus provides a programmable timer to remind you that a call is still on Hold. You will hear hold reminder ring back when the hold time expires.

- Hold Reminder time set in web 5.3.1 call handing

4.8 Hour Mode

There are two format hour clock show on the LCD of XD10.One is 12-hour mode and the other is 24-hour mode. There are two ways to modify the hour mode show.

- Press F#5 to switch the hour mode.
- In the web 5.1.1 to select the hour mode for the extension.



Web 5.1.1 Ext Setting

- For IP phone, please enter the IP phone's GUI to decide enable or disable 12 Hours clock.

4.9 Mute

The Mute feature allows the user to disable the handset transmitter or the speakerphone microphone.

- To enable the mute feature, press "Feature 7 6".
- To disable the mute feature, press "Feature 7 6" again.

4.10 Paging (All/Group) / Paging Answer

Paging function can be initiated from any extension in the X16plus. Dialing a Paging Group Directory number allows an extension to broadcast a page to all assigned members of the selected paging group.

- Press "page" key to make All page.
- Dial 401~408 to make group page (1~8).
- Dial 409 to make external page.
- IP phone in LAN or WAN under the same router will be paged.

4.11 Paging Accept/Deny

You can block one-way pages (internal, group, and all page) over the phone speaker by dialing the Page Deny code.

- To enable Paging Deny, press "Feature # 9".
- To disable Paging Deny, press "Feature # 9" again.

4.12 Transfer / Recall

Transfer is used to deliver calls at your extension to another extension. It means that call can be routed to X16plus's system destinations: an extension or an outside phone number.

When transferring a trunk call to another extension, if the call is not picked up within 30 seconds, the call will be recalled back to the transferring extension.

- Extension talks with a trunk call or an extension. Press "transfer" key to hold the call and dial another extension number.
- Even if the extension set voice announce, the transfer call will ring that extension.
- After hearing "ring back tone", Press "transfer" key again to make transfer the call.
- Transfer Recall time set in web 5.3.1 call handing.

4.13 Phone Book

Press "PhBk" key to enter phone book function. Every XD10 extension has max 40 names with phone numbers.

- Name: maximum 16 characters.
- Number: maximum 16 digits.

- **Operation Menu**

Press "PhBk"key
- VIEW
  - Edit
    - Edit name
    - Edit number
  - Dial
  - Del
- ADD
  - Add name
  - Add number
  - Save
- delAll

  - Press "hold" key to exit to the previous level menu.

- **ADD a new number into Phonebook (ADD)**

Press "PhBk" to enter the PHONEBOOK mode.

PHONEBOOK :5		
view	add	delAll

Press "add" to ADD menu item. The LCD show.

(ENTER NAME)		
bksp	save	chg

Press dial pad to start to enter the name . "bksp" is backspace key, it can delete one digit or character once. "chg" can clear all the input, and you can input yours again. "save" can be saved and go to number input.

(ENTER NUMBER)		
bksp	save	chg

If you want to cancel the add menu item, please press "HOLD" key to exit to the previous level menu.

Repeatedly press the dial pad key that has letters or symbols, until the display shows the letter or symbol that you want to save. User also can press [Navigation **>**] key to edit the next character. To put a 'space', you just press [Navigation **>**] or press [Digit-1] key once.User also can wait 2s to edit the next character.

1 Space, - ' & . ( ) 1	**2** A B C a b c 2	**3** D E F d e f 3

4 G H I g h i 4	**5** J K L j k l 5	**6** M N O m n o 6
7 P Q R S p q r s 7	**8** T U V t u v 8	**9** W X Y Z w x y z 9
* *	**0** 0	**#** #

- If phone book entries are fully used, user still press "ADD" the LCD will display.

FULL! view add delAll

- **Save a Redial number into the Phonebook**

Press "add" to enter ADD menu item. The LCD displays

(ENTER NAME) bksp save chg

Enter the Name (by using the dial pad), and then press "save" to enter the number.

(ENTER NUMBER) bksp save chg

Press [REDIAL] to copy the phone number from the LNR onto the LCD.

For example: The LCD displays:

5775141 bksp save chg

Then, you can "save" the redial number.

- **Find the phone number**

Press [PhBk] to enter the PHONEBOOK mode. Press "view" to select this view item. The first entry in the phonebook will show on the LCD.

AMY 5775141

The following operations can find and display the phonebook information.

(i). Directly press [Navigation ▼/▲] to find the item to review.
(ii). Repeatedly press the dial pad key that has letters or symbols, until the display shows the letter or symbol that you want to review.
(iii). A combination of the above operations.

For example, press [Navigation ▼].

Bob 574575141

Then, press 'J'. The LCD will display:

Jim 5745757141

However, if there is no entry with the first letter "J", the LCD will display:

No entries For “J”

- **Dialing out from Phonebook**

Select & View the entry you want.

Jim 5745757141

Press ([Navigation OK]) key to review the detail record. The menu item under the VIEW mode will be shown.

Jim Edit dial del

Press softkey F2 to dial to Jim. The LCD then displays:

CO LN 740 5745757141

- **Editing the Information from Directory**

View the entry you want, for example:

```
Jim
5745757141
```

Press [Navigation ENTER(OK)]. The menu item under the VIEW mode will be shown.

```
Jim
Edit      dial      del
```

If you want to edit/modify the name or number information, Press "Edit". The LCD displays:

```
Jim
bksp    save      chg
```

If you want to edit number only, please press [Navigation down]. Press Navigation UP] will back to name edition.

```
5745757141
bksp    save      chg
```

After finishing the editing, press "save" to save to phonebook.

5. Quick Installation

This Quick Installation helps you to install the product quickly and easily. For detailed instructions on installation, and further setup option, please refer to the configuration chapter.

5.1 Connecting the X16plus Web

Connect the ethernet network cable to the X16plus's LAN port or WAN port. Then connect the other end of the network cable to a switch or hub or directly your PC's Ethernet port.

Connecting with LAN port：

- The web access URL is "x16plus"，You can enter "x16plus" in Internet Explorer to access the web.
- The default LAN IP is 192.168.123.1，You can enter http://192.168.123.1:8800/ in Internet Explorer to access the web.

Connecting with WAN port：

- The default WAN port type is DHCP. It will be 0.0.0.0 if there is not exist DHCP server.
- Please dial "Feature 6 6" on the extension phone. It will show the WAN IP address.
- On the extension phone, dial "Feature # 0" + "9999"to enter system Settings, set the WAN IP type and IP address in the third IP address, and save the settings to take effect. You can login the web http://IP:8800/.

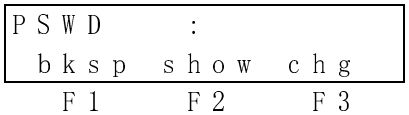
Login in and logout the web：

- The default admin account is "admin", password is "XB-X16+".
- Press the "logout" button on the upper right corner of the web.
- Web Logout Time can be set in web 5.3.1, default is 30 minutes.

Retrieve or clean web password：

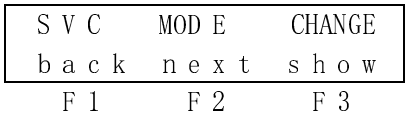
Digital extension presses "Feature # 0" LCD show:

Check	Password



Input "9999", press "F2" show.

1.	Service mode
Range:	DAY/NIGHT/TIME



Press "F2" next 5 times show system manage

6.	System manage

```
SYSTEM  MANAGE
 back  next  show
  F1    F2    F3
```

Press "F3" show to enter software version

6.1.	Software

```
SOFTWARE  VERSION
 back  next  show
  F1    F2    F3
```

Press "F2" next twice to enter web password clear.

6.3	Web password

```
WEB  PW  CLEAR
 back  next  show
  F1    F2    F3
```

Press "F3" show current web password.

6.3.1	Current password

```
XXXXXXXX
 back          clear
  F1    F2    F3
```

Press "F3" clear to confirm.

6.3.1	Clear password

```
Clear  Password
 yes           no
  F1    F2    F3
```

Press "F1" yes to set web password default.

6.3.1	Current password

```
XXXXXXXX
 back          clear
  F1    F2    F3
```

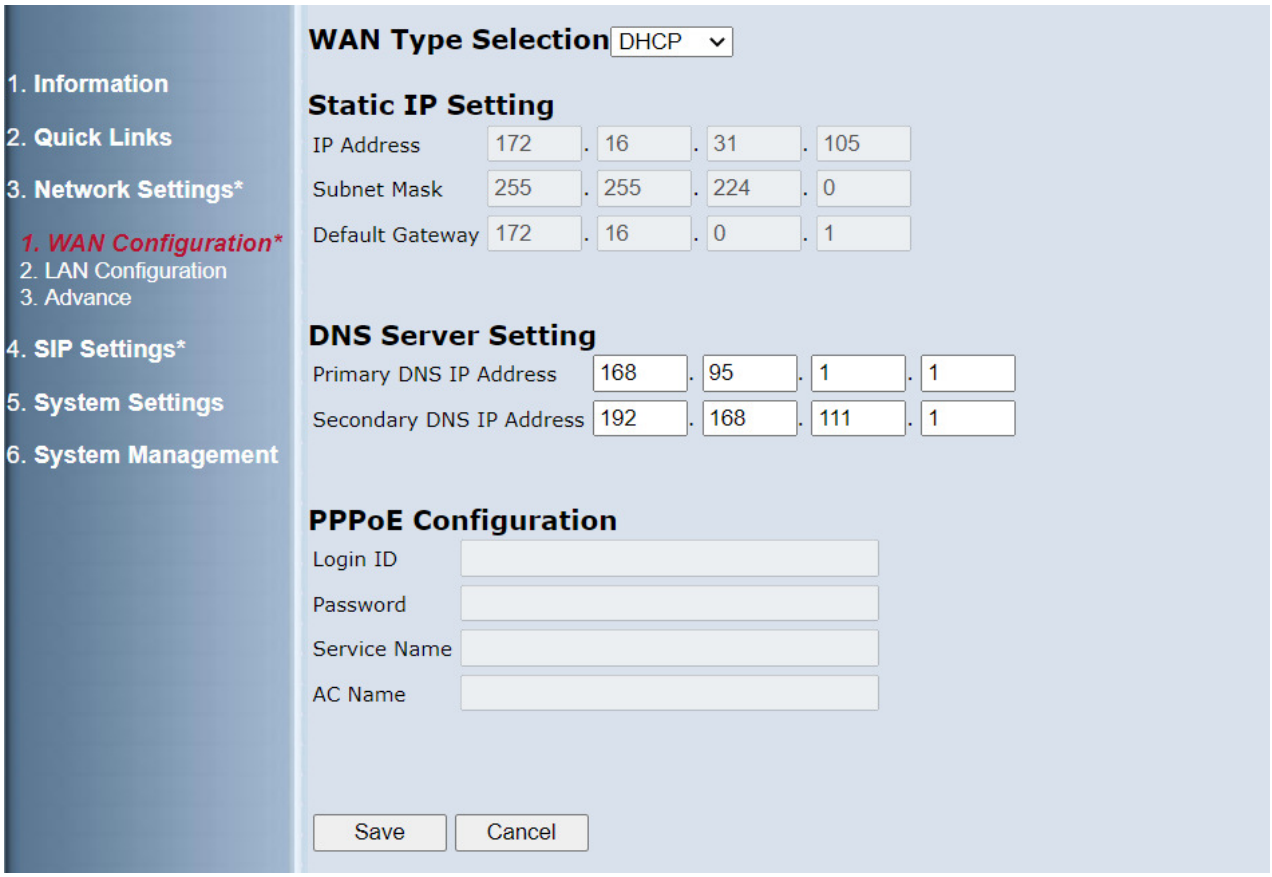
5.2 WAN Configuration

There are three modes that you can configure WAN IP address: Static IP mode, DHCP mode, and PPPoE mode.

- **Static IP**
  - The static IP is the address for data transition. Need set the static IP address, subnet mask, Default Gateway and DNS.

- **DHCP**
  - The Dynamic Host Configuration Protocol (DHCP) is an Internet protocol for automating the configuration of computers that use TCP/IP. DHCP can be used to automatically assign IP addresses, to deliver TCP/IP stack configuration parameters such as the subnet mask and default router, and to provide other configuration information.

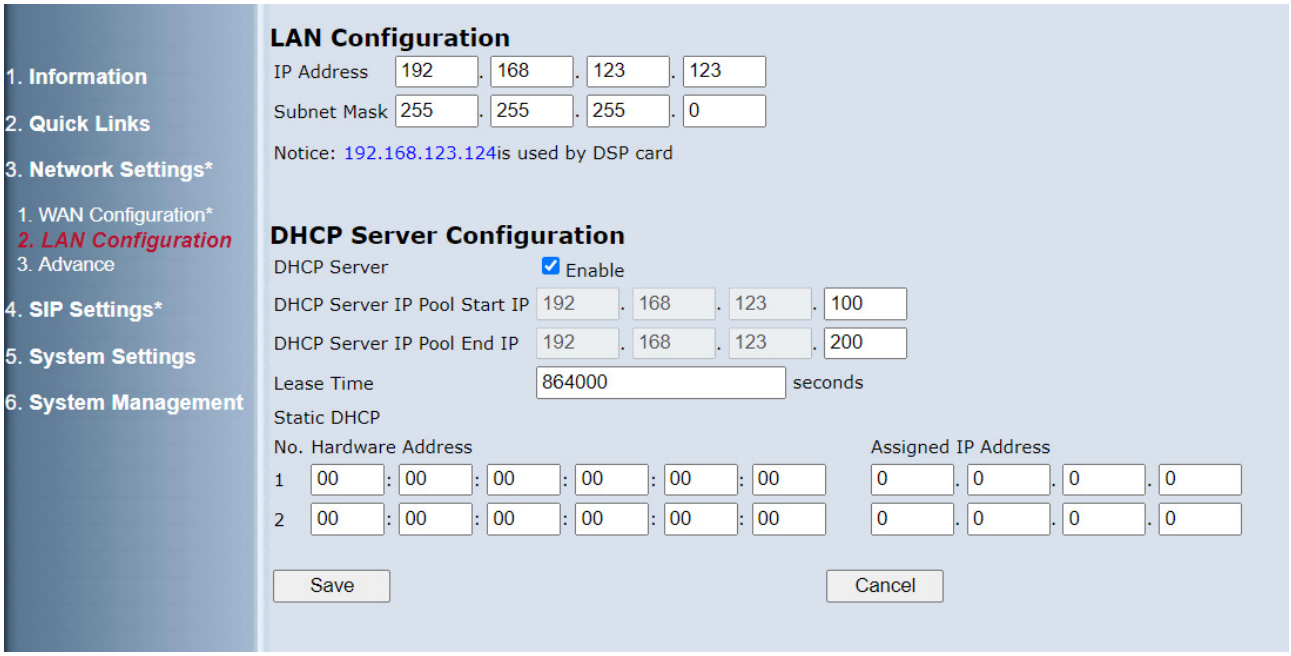
- **PPPoE**
  - The Point-to-Point Protocol over Ethernet (PPPoE) requires a user name and password that your ISP has provided to you to establish your connection.



Web 3.1 WAN Configuration

5.3 LAN Configuration

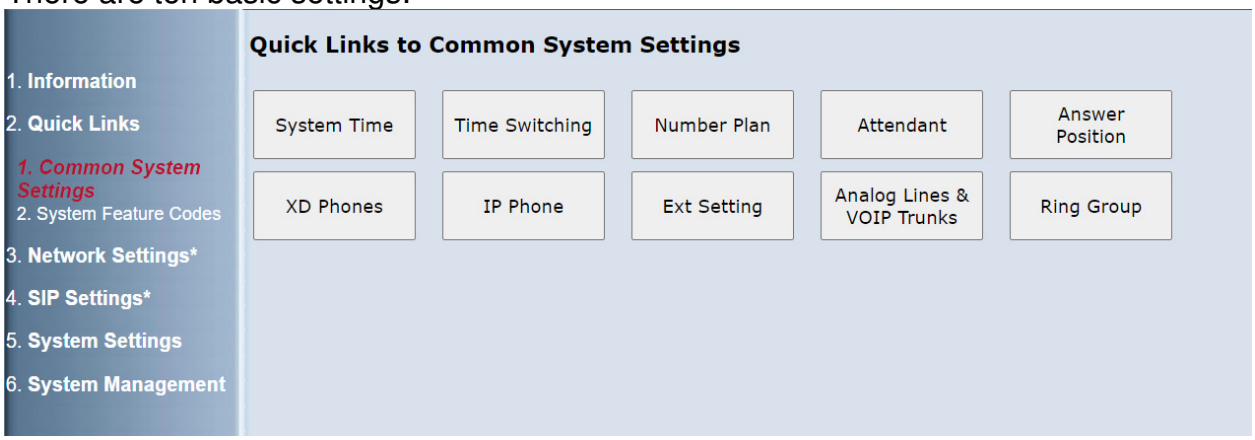
Set LAN IP and Subnet Mask for LAN interface. A DSP IP address will be configured for IP call. You can also enable or disable DHCP Server and configure related settings.



Web 3.2 LAN Configuration

5.4 Quick links to Common System Settings

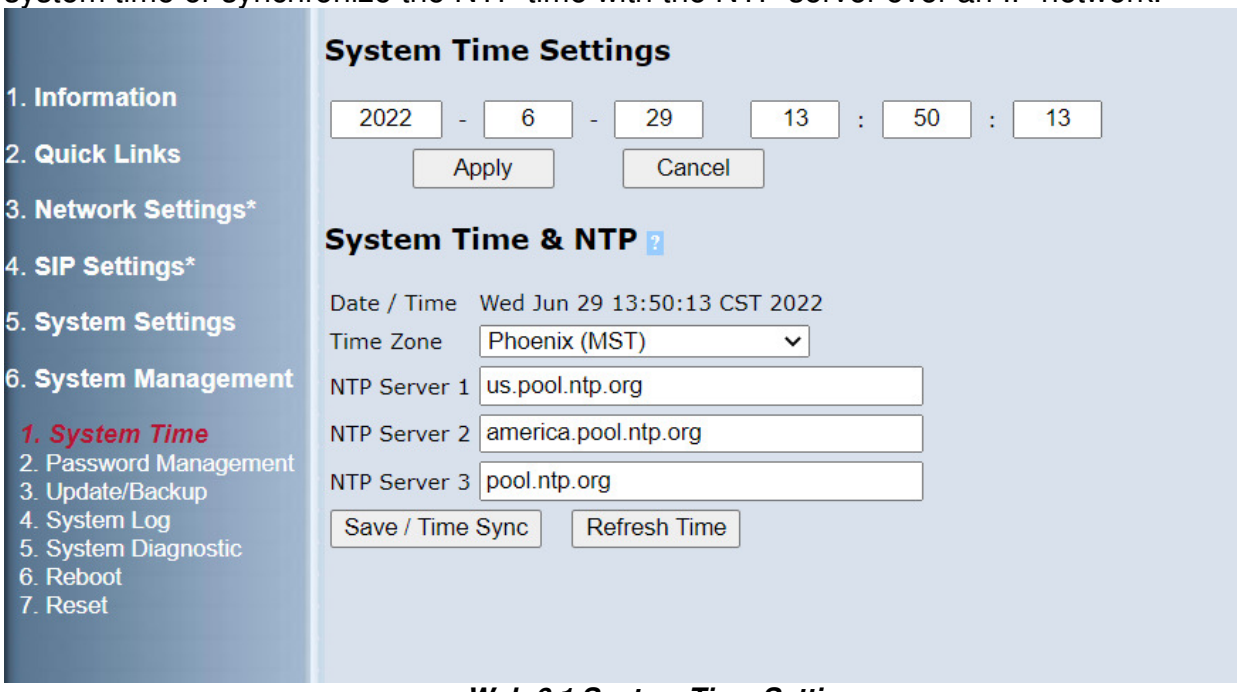
Once you login to the system, you can choose the Web 2.1 to set the system. There are ten basic settings:



Web 2.1 Quick links to Common System Settings

5.4.1. System Time Setting

When the X16plus system is disconnected from the network, you can manually set the system time or synchronize the NTP time with the NTP server over an IP network.



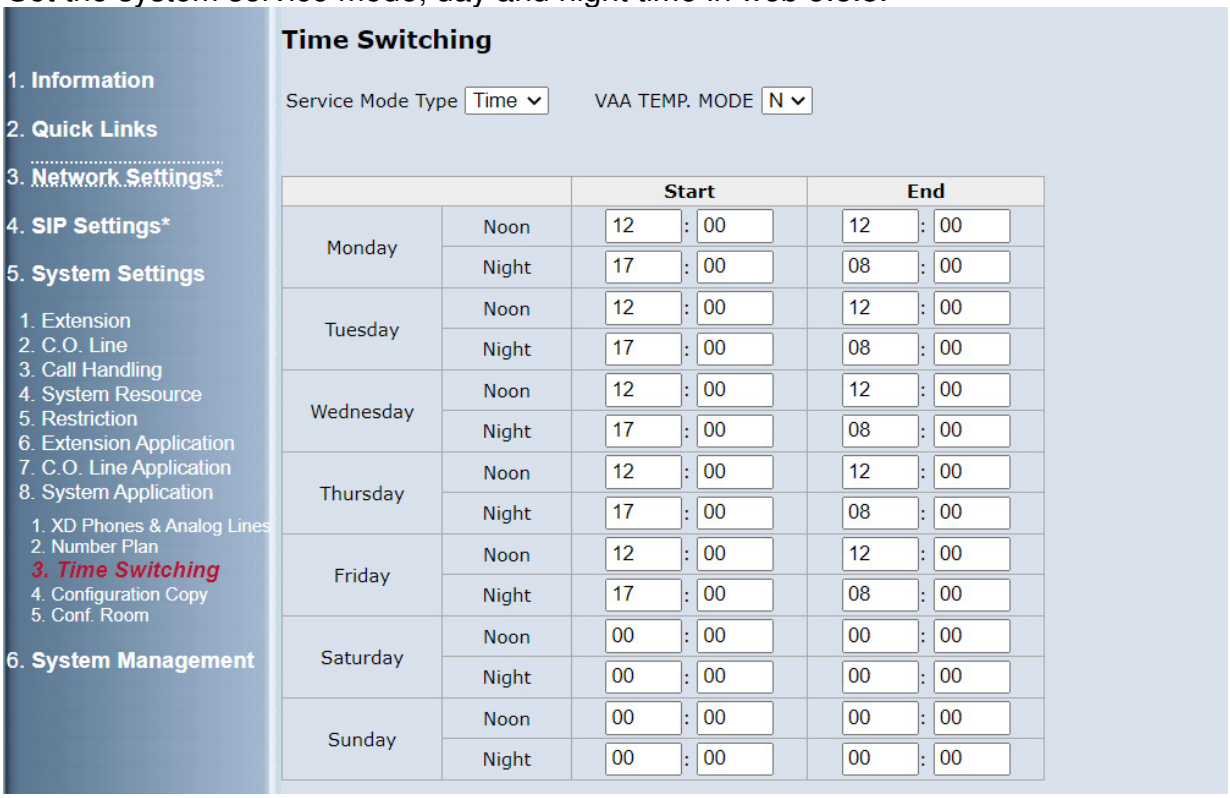
Web 6.1 System Time Settings

Name	Description
Setting system time by manually	Enter the system time and press Apply button to save the Settings: Year-month-day hour: minute: second
System time calibration	Date/time：the system time Time zone： NTP Server1： NTP Server2： NTP Server3：
Save/time sync	Save NTP server setting and synchronize the current system time.
Refresh time	Synchronize the current system time with the NTP server only.

- **Note：**
  - After the network is normal, read the server standard time from the NTP server and refresh the LCD time of the digital phone.

5.4.2. Time Switching

Set the system service mode, day and night time in web 5.8.3.



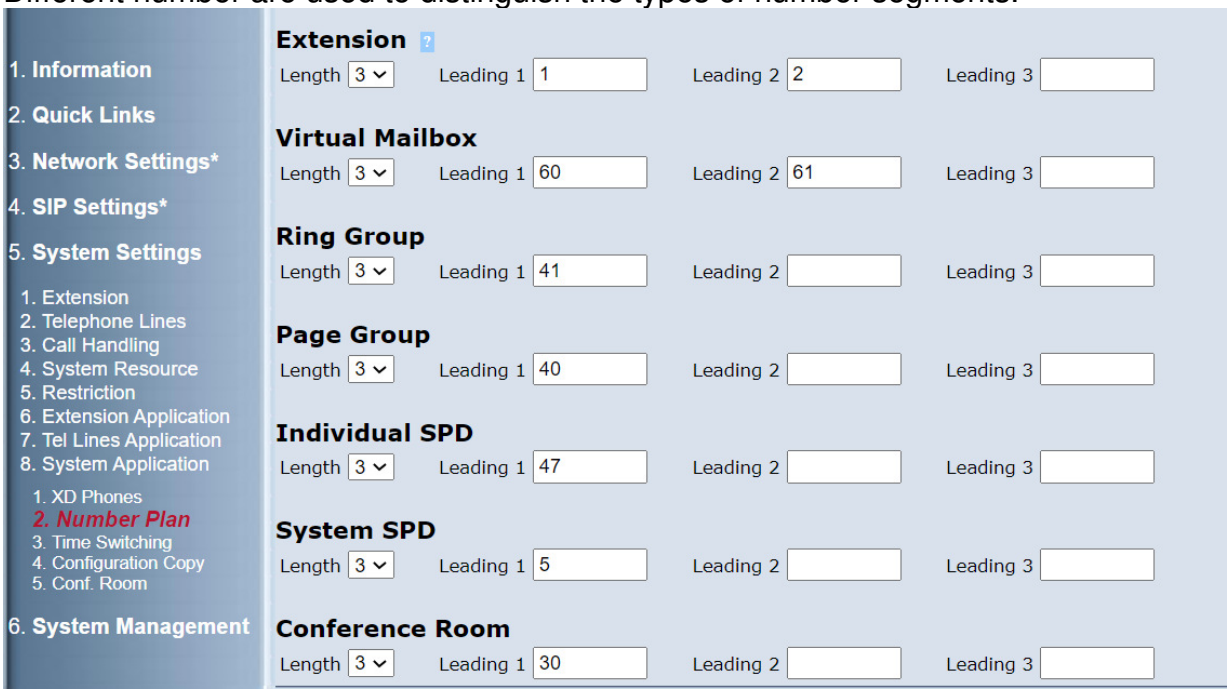
Web 5.8.3 Time Switching

Name	Description
Service mode Type	Day: The system time service is in day mode Night: The system time service is in night mode Time: The system time service should be determined by the time periods of week, noon, and night.
VAA Temp. MODE	If selecting Y，VAA will give temp greeting when there is an incoming call to VAA.
Noon and Night for Monday to Sunday	Take Monday as an example, from 8:00 a.m. to 16:59 p.m. From 17:00 p.m. to 8:00 a.m. 12:00 is noon.

- **Note：**
  - In the night service mode, N (night) is displayed on the second line of the LCD of the EKT.
  - When the service mode is set to time, the incoming trunk call VAA greeting will automatically be switched according to the time switch setting.

5.4.3. Number Plan Setting

Set number plan setting in web 5.8.2. Number plan must be set before other web setting. Different number are used to distinguish the types of number segments.



Web 5.8.2 Number Plan

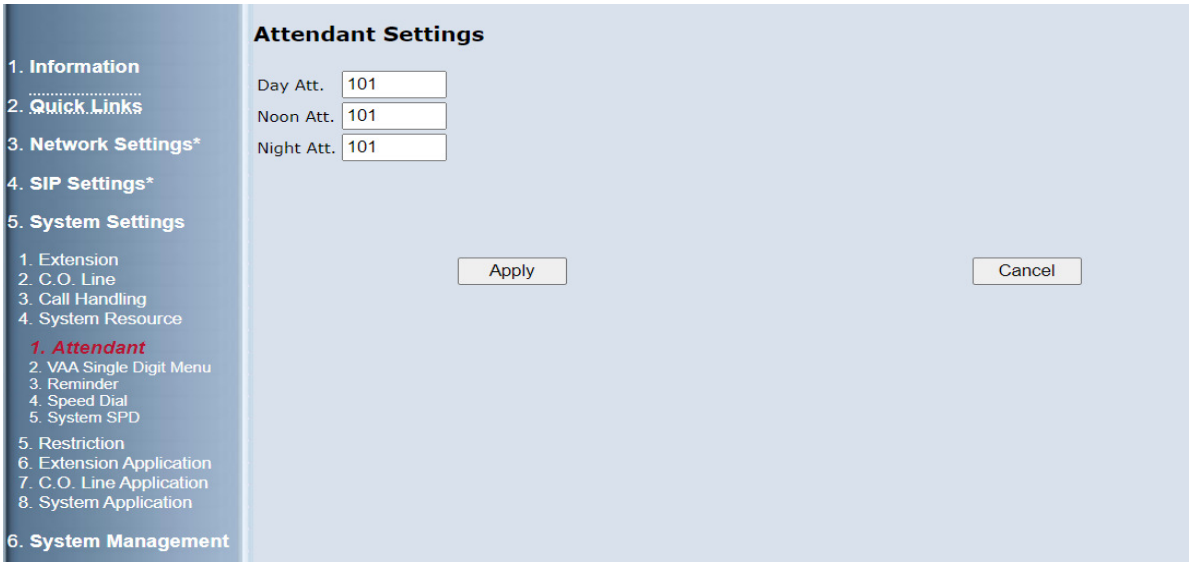
Name	Description
Extension	Extension length is 3, leading is 1 and 2. XD10 extensions number range are 101~116. IP phones number range 201~216.There are 32 extensions in X16plus system.
Virtual mailbox	Virtual mailbox length is 3, leading is 60 and 61. There are 16 virtual mailboxes in X16plus system.
Ring group	Ring group number length is 3, leading is 41. number range is 410~417. There are 8 ring group in X16plus system.418 is voicemail number,419 is auto attendant number.
Page group	The length of page group is 3, leading is 40.the number range is 400~408. 400 is all page. 408 is external page.
Individual SPD	The length of individual SPD is 3, leading is 47.the number range is 470~479. There are 10 individual SPD numbers for every phone.
System SPD	The length of system SPD is 3, leading is 6.the number range is 600~619. There are 100 system SPD numbers in X16plus system.
Conference room	The length of system SPD is 3. leading is 6.the number range is 600~619. There are 100 system SPD numbers in system.

Name	Description
CO line	The length of CO/IP Trunk number is 3, leading digit is 74x, 75x. The number range 741~746 are PSTN numbers .751~756 (or ~758) are IP trunk numbers.
Auto attendant	The length of VAA number is 3, leading is 89. The number range is 890~895. There are 6 auto attendants to pick up the trunk call at the same time.
Trunk route	The length of trunk route number is 2. The leading is 80 and 81. 80 is PSTN trunk group, 81 is IP trunk group.
Operator code	The length of operator number is 1. The leading is 0. Dial 0 to call the operator.
Account code	The length of account code number is 2. The leading is 79. Dial 79 to access account code feature.
LCR	The length of LCR is 1. Default leading is NULL.

- **Note：**
  - Change number plan the number will be rearrangement.
  - Change number plan need restart the system.

5.4.4. Attendant Setting

Set attendant setting in web 5.4.1. Attendant is an operator. User can set the operator extension in this page.



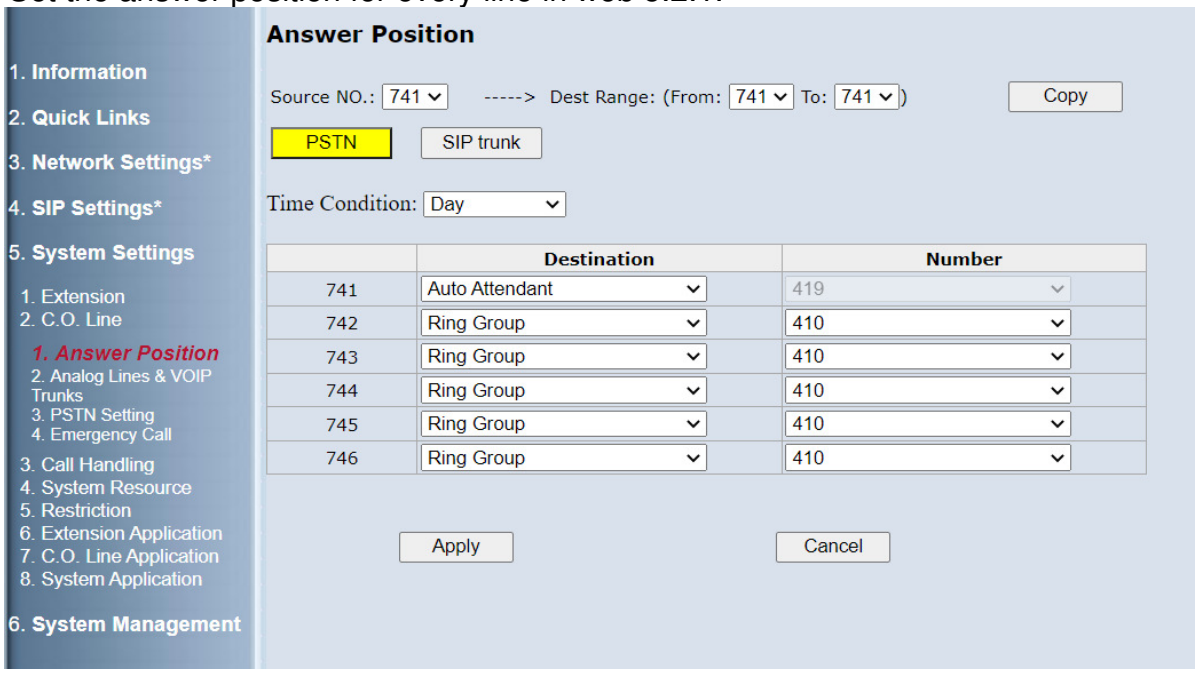
Web 5.4.1 Attendant

Name	Description
Day/night/noon attendant	Dial 0 to call the attendant.

- **Notes:**
  - When the attendant extension is busy. Other extension or outside line makes a call to the attendant, and the attendant rings at background. You can use the function key "F#2" to enable or disable the busy ring tone.

5.4.5. Answer Position

Set the answer position for every line in web 5.2.1.

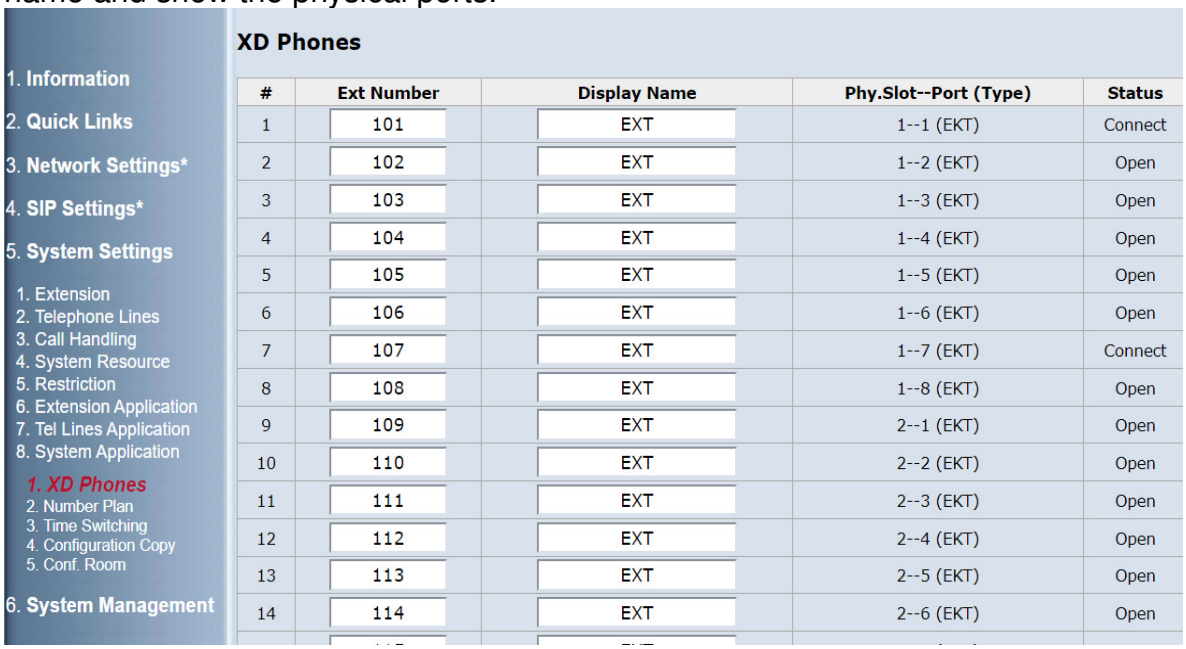


Web 5.2.1 Answer position

Name	Description
C.O.Line number	Copy answer position source C.O. Line.
Source From NO.	Copy answer position from C.O. Line.
Dest to NO.	Copy answer position to C.O. Line.
PSTN/SIP trunk	PSTN/SIP trunk switch.
Time Condition	Day/Night switch
Destination	They are Extension, Ring Group, Auto Attendant, Voice Mail, virtual mailbox, Hang up and External Number. The default set is Ring Group 410.
Number	The detail number of every answer type.

5.4.6. XD10 Phones

Set XD10 extensions in web 8.1. This page used to swap numbers, modify display name and show the physical ports.



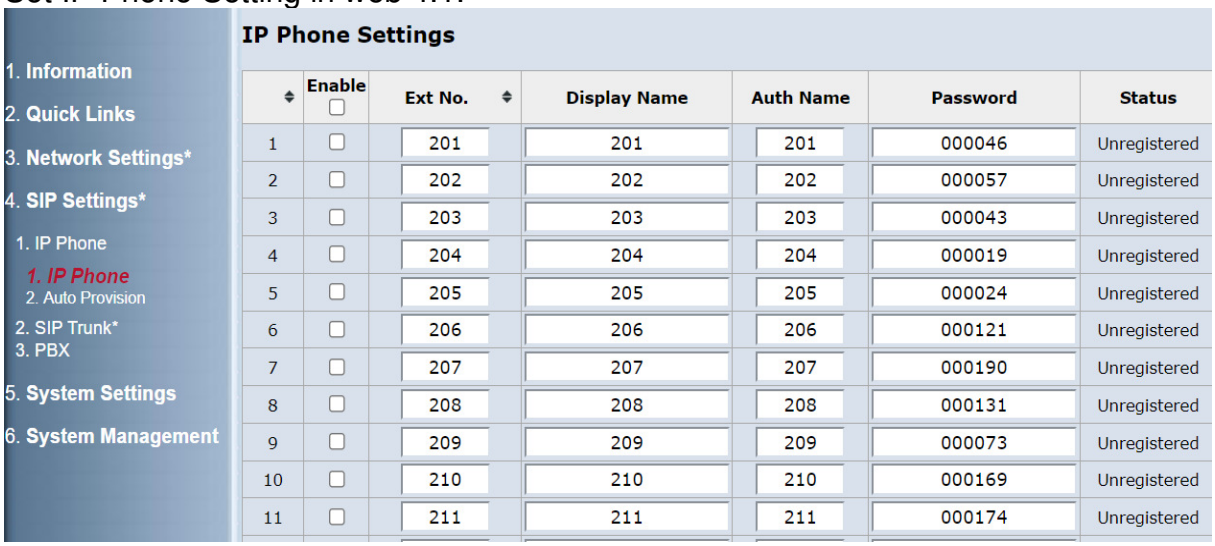
#	Ext Number	Display Name	Phy.Slot--Port (Type)	Status
1	101	EXT	1--1 (EKT)	Connect
2	102	EXT	1--2 (EKT)	Open
3	103	EXT	1--3 (EKT)	Open
4	104	EXT	1--4 (EKT)	Open
5	105	EXT	1--5 (EKT)	Open
6	106	EXT	1--6 (EKT)	Open
7	107	EXT	1--7 (EKT)	Connect
8	108	EXT	1--8 (EKT)	Open
9	109	EXT	2--1 (EKT)	Open
10	110	EXT	2--2 (EKT)	Open
11	111	EXT	2--3 (EKT)	Open
12	112	EXT	2--4 (EKT)	Open
13	113	EXT	2--5 (EKT)	Open
14	114	EXT	2--6 (EKT)	Open

Web 8.1 XD Phones

Name	Description
Extension	Show the extension number. Input other extension number in extension user name, press save, the number swapping will be done.
Display name	Show the extension display name and PSTN display name. the default extension display name is EKT. The default PSTN display name is CO LN. The display name can be English or numeric.
Physical slot-port(type)	Show the physical position, slot and port. Show the port type EKT or FXO.
status	show the extension or line status: Connect/Open

5.4.7. IP Phone Setting

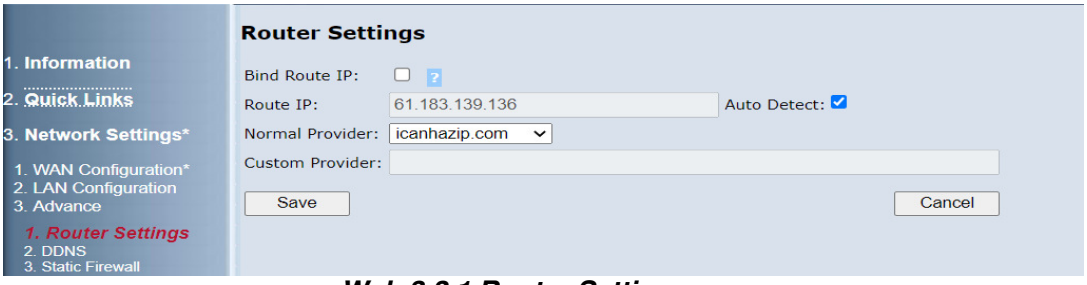
X16plus supports 16 IP phones. The default extension numbers are 210 to 216. Set IP Phone Setting in web 4.1.



Web 4.1 IP phone

Name	Description
Enable	Enable or disable this IP Phone.
Ext No.	The Ext number of IP Phone
Display name	The display name of IP Phone
Auth name	Authentication name for registering an IP Phone number.
password	Authentication password for registering an IP Phone number. The authentication password is set to a random value
status	Registration status of an IP Phone number. There are registered and unregistered states.

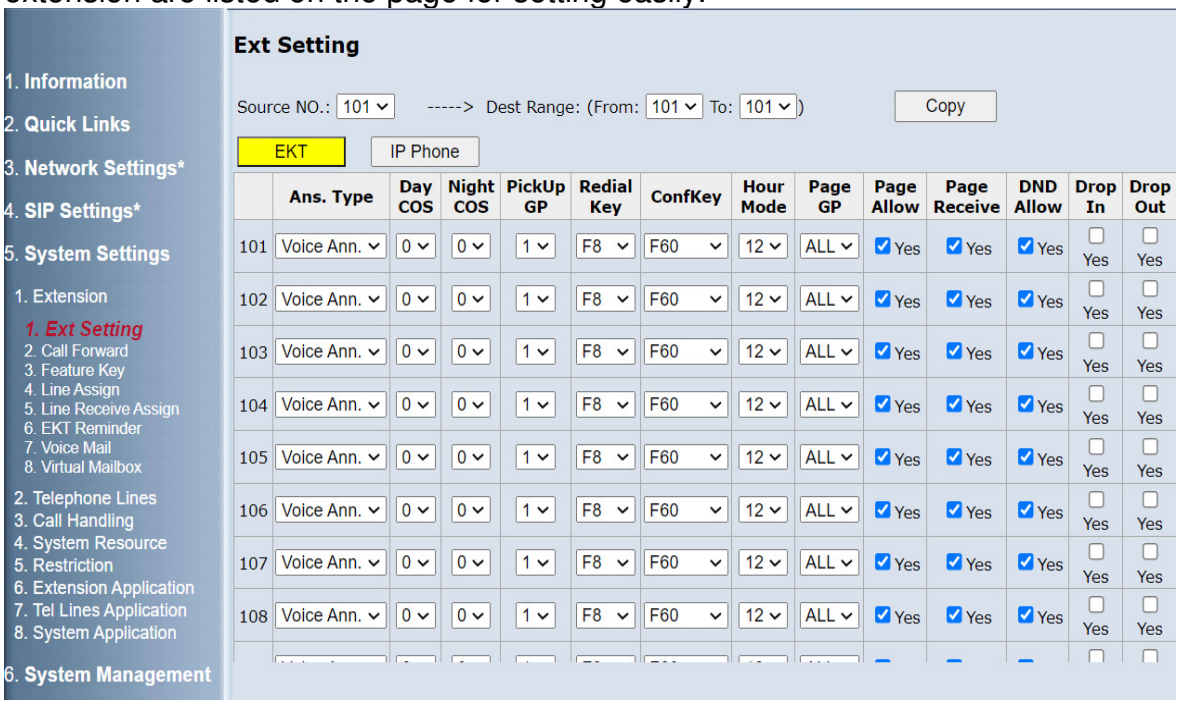
- **Notes:**
  - If X16plus is under a router and IP phone is in outside internet. Auto Detect should be enable to detect the router WAN IP.



Web 3.3.1 Router Setting

5.4.8. EKT Setting

Set main parameters of every extension in web 5.1.1. The main parameters of the extension are listed on the page for setting easily.



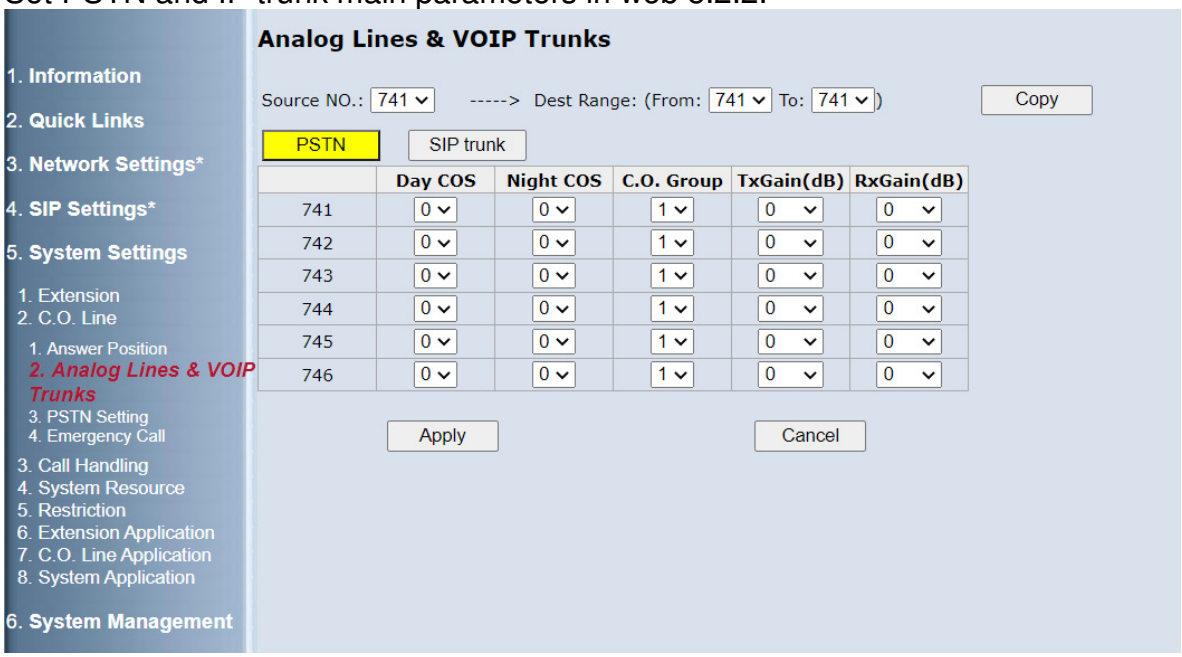
Web 5.1.1 Ext Setting

Name	Description
Extension	Copy source extension.
Source From NO.	Copy From extension.
Dest To NO.	Copy To extension.
copy	Only parameters displayed on the page are copied.
EKT IP Phone	EKT or IP phone page Switch.
parameter table	Ans. Type, Day COS, Night COS, pick up group, Redial Key, ConfKey, Hour mode, Page GP, page allow, page receive, and DND allow drop in, drop out.

- **Notes:**
  - Ans. Type mean answer type. Default is voice announce.
  - Redial key F8 or F78.
  - ConfKey F60, Room 1~4.
  - Drop in Drop out means Drop incoming/outgoing call when the talk time (CO LN Drop Timer in web 5.3.1) expires.

5.4.9. Analog Lines & VOIP Trunks

Set PSTN and IP trunk main parameters in web 5.2.2.

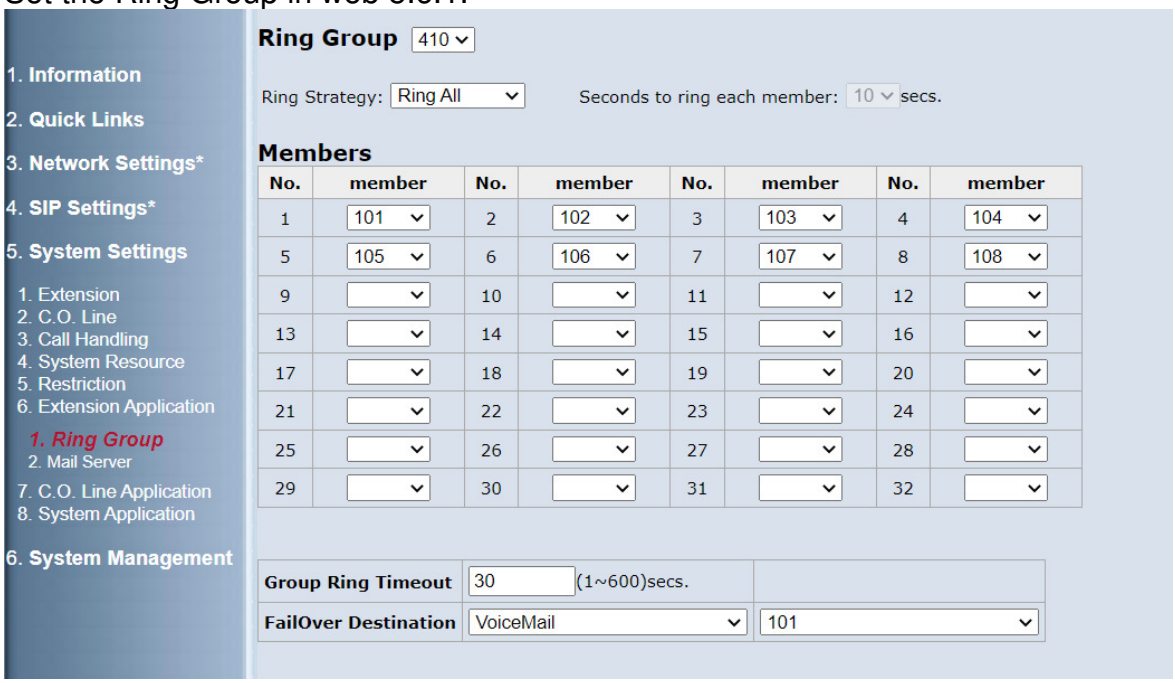


Web 5.2.2 Analog Lines & VOIP Trunks

Name	Description
Trunk number	Copy source trunk.
Source From NO.	Copy From trunk.
Dest To NO.	Copy To trunk.
copy	Only copy parameters that are displayed in this page
IP trunk	Switch to IP trunk
Parameters table	Day COS, Night COS, CO group, Transfer to trunk, Tx Gain, Rx Gain.

5.4.10. Ring Group Setting

Set the Ring Group in web 5.6.1.



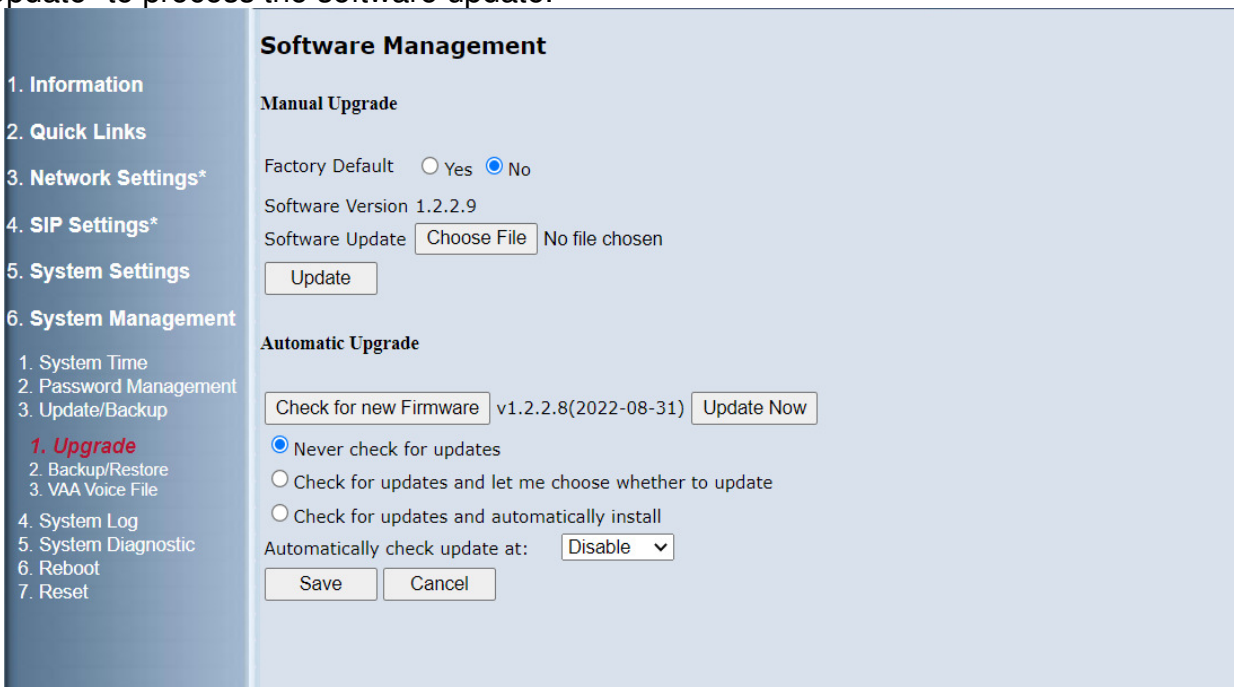
Web 5.6.1 Ring Group

Name	Description
Ring Group	There are 10 Ring groups (410~417) can set members. 418 is for voice mail. 419 is for VAA.
Ring Strategy:	Sequentially：Ring the member one by one when seconds to ring each member timeout. Ring All: All members ring at the same time.
Seconds to ring each member	If the ring strategy is sequentially, after the time ring next member.
Members	Ring group can set 32 ring members, members can be digital extension or IP phone.
Group Ring timeout	If Ring Group do not answer by any member, after the time this call will go to failover destination.
Failover Destination	They are Extension, Ring Group, Auto Attendant, Voice Mail, virtual mailbox, Hang up and External Number. The default set is voicemail to EKT 101.

5.5 The Update Software

- **Manual Upgrade Use Web**

The new released software could be upgraded from the Local PC side or remotely in web 6.3.1. Click the "Browse" to locate the new software image file in the PC. Then, click "Update" to process the software update.



Web 6.3.1 Upgrade

NOTE:

- If set the Factory Default item to yes, after software updating the system will reset to default except IP address.
- The upgrade process takes about 5 minutes to complete, and your X16plus system will reboot.

- **Automatic Upgrade**
  - **Check for new firmware**
    Click this button to get the latest software version on the upgrade server.
  - **Update now**
    Click this button to update the system with the latest software version on the upgrade server.
  - **Never check for updates** (default)
    If this item is checked, the automatic update function will not work.
  - **Check for updates and let me choose whether to update**
    The system will regularly get the latest software version.
  - **Check for updates and automatically install**
    The system will regularly check the latest software version on the upgrade server. If the version is newer than the local version, the system will use the latest version on the server for upgrade

- **Automatically check update at**

  Use this option to specify the time period of the automatic upgrade task. The mode can be specified as daily or weekly. After reaching the specified time, the system will execute the automatic upgrade task according to the method checked by the user.

- **Manual Upgrade Use XD10 extension**

Digital extension presses "Feature # 0" LCD show:

Check	Password

```
PSWD      :
 bksp  show  chg
  F1    F2    F3
```

Input "9999", press "F2" show.

1.	Service mode
Range:	DAY/NIGHT/TIME

```
 SVC   MODE   CHANGE
 back  next   show
  F1    F2    F3
```

Press "F2" next 5 times show system manage

6.	System manage

```
SYSTEM  MANAGE
 back  next  show
  F1    F2    F3
```

Press "F3" show to enter software version

6.1.	Software

```
SOFTWARE  VERSION
 back  next  show
  F1    F2    F3
```

Press "F3" show current software version.

6.1	software

```
1.2.2.8
 back  next   upg
  F1    F2    F3
```

Press "F3" upg to upgrade from server.

6.1.1	Server version

```
 UPG TO  1.2.2.9
 yes             no
  F1    F2    F3
```

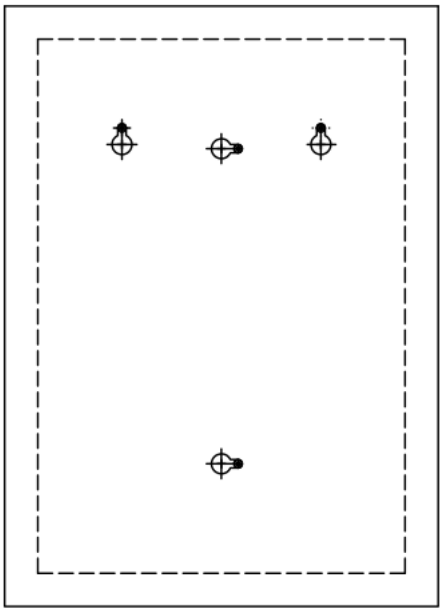
Press "F1" upgrade confirm.

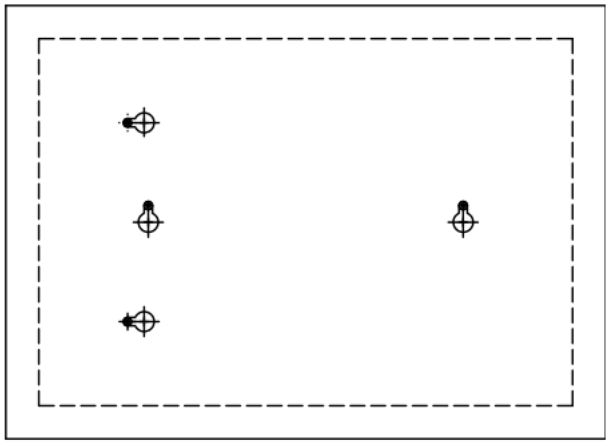
6.1.1	confirm

```
 UPDATING...
wait for 10 mins
  F1    F2    F3
```

6. Wall Mount Installation

1. Tools: One piece “Template Page” and two pcs screws





2. Installation method

   a. Put “template page” on the wall and decide to use vertical or horizontal direction for installation.
   b. Lock two screws for vertical or horizontal direction in screws position to ensure the distance of two screws is correct for installation. Please don’t tighten two screws into wall completely. (keep about 3~5 mm space)
   c. Put the X16plus server on the screws to finish the installation.

7. Customer Information Statement

The information informing the user of his and the telephone company's rights and obligations is outlined on the following pages. This information will be included in the final version of the manual.

Customer Information

(1). This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On bottom of this equipment is a label that contains, among other information, a product identifier of US:D6XKD01AX16PLUS If requested, this number must be provided to the telephone company.

(2). If this equipment X16plus-HYBRID / X16plus causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

(3). The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modification to maintain uninterrupted service.

(4). If you experience trouble with this equipment, you disconnect it from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

(5). Please follow instructions for repairing if any (e.g. battery replacement section); otherwise do not alternate or repair any parts of device except specified.

(6). Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

(7). If the telephone company requests information on what equipment is connected to their lines, inform them of:

(a) The telephone number that this unit is connected to,
(b) The ringer equivalence number [0.1A]
(c) The USOC jack required [RJ45]
(d) The FCC Registration Number

Item (b) and (d) are indicated on the label. A plug and jack used to connect this equipment to the premises wiring and telephone
network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA.
The ringer equivalence number (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the RENs of all devices on any one line should not exceed five (5.0). If too many devices are attached, they may not ring properly.

(8). If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable alarm equipment, consult your telephone company or a qualified installer.

(9). This equipment is hearing aid compatible.

Service Requirements

In the event of equipment malfunction, all repairs should be performed by our Company or an authorized agent. It is the responsibility of users requiring service to report the need for service to our Company or to one of our authorized agents.

Service can be facilitated through our office at:

XBLUE NETWORKS.
20801 N 19th AVE, STE 2, PHOENIX, AZ 85027
913-599-2538

====== End of File ======