



Digit Collecting and Dialing Rule Description

Version: <1.1>

Release date: <2018-5-11>

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1 Introduction

1.1 Overview

For Fanvil C series phones, most digit delivery and replacement requirements can be met by configuring dial plan and dial peer. However, for novices or users who have not use the two functions for a long time, it is difficult to configure the functions on the webpage without reading the instruction. Even if they have read the instruction, they may easily forget the operations several days later. Therefore, Fanvil optimized the two functions, allowing users to easily configure them or remember the configuration method several days after reading the instruction.

1.2 Applicable Models

This document applies to Fanvil X3S, X4, X5S, and X6.

2 Operation Description

2.1 Basic Settings

X34 supports eight dialing methods:

- Press # to invoke dialing: A # symbol is suffixed to the dialed number.
- Dial fixed length: The call is automatically dialed out when the entered number reaches the specified length. This method is effective in dialing mode.
- Dial after timeout: When a specified timeout interval is expired, the system automatically dials. This method is effective in dialing mode.
- Press # to do blind transfer: After entering the transferred-to number, press # to transfer the call to the third party.
- Blind transfer on onhook: If you hang up or finish the call by pressing the handfree key after entering a number, the call is transferred to the third party.
- Attended transfer on onhook: To activate this mode, hang up or press the handfree key. Then the call is transferred to the third party.
- Attended transfer on conference onhook: In a three-party call, when one party hangs up, the two parties can still keep the call.
- Press DSS key to do blind transfer: After adding a number to the memory key and pressing the transfer key, you can press this key to transfer the call to the third party.

X56 supports eight dialing methods:

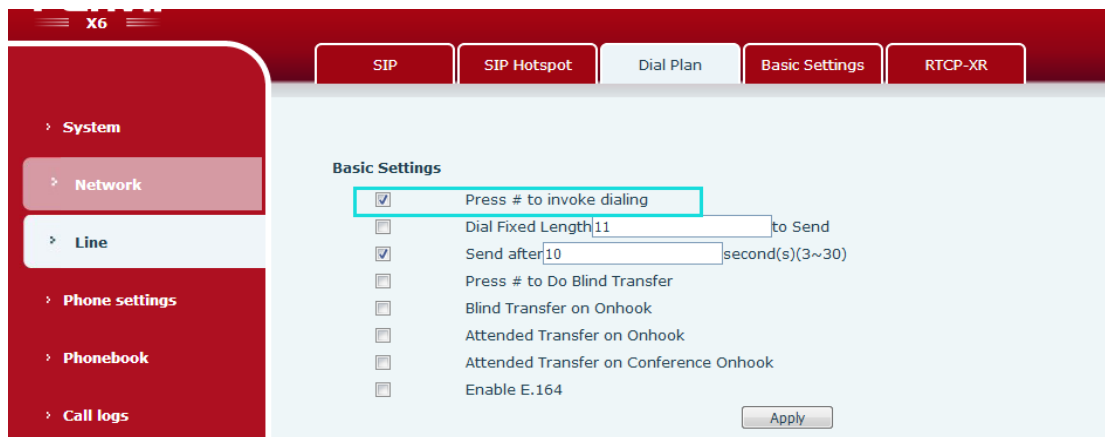
- Press # to invoke dialing: A # symbol is suffixed to the dialed number.
- Dial fixed length: The call is automatically dialed out when the entered number reaches the specified length. This method is effective in dialing mode.
- Dial after timeout: When a specified timeout interval is expired, the system automatically dials. This method is effective in dialing mode.
- Press # to do blind transfer: After entering the transferred-to number, press # to transfer the call to the third party.
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- Attended transfer on onhook: To activate this mode, hang up or press the handfree key. Then the call is transferred to the third party.
- Attended transfer on conference onhook: In a three-party call, when one party hangs up, the two parties can still keep the call.
- Enable E.164.

Android phones support eight dialing methods:

- Press # to invoke dialing: A # symbol is suffixed to the dialed number.
- Dial fixed length: The call is automatically dialed out when the entered number reaches the specified length. This method is effective in dialing mode.
- Dial after timeout: When a specified timeout interval is expired, the system automatically dials. This method is effective in dialing mode.

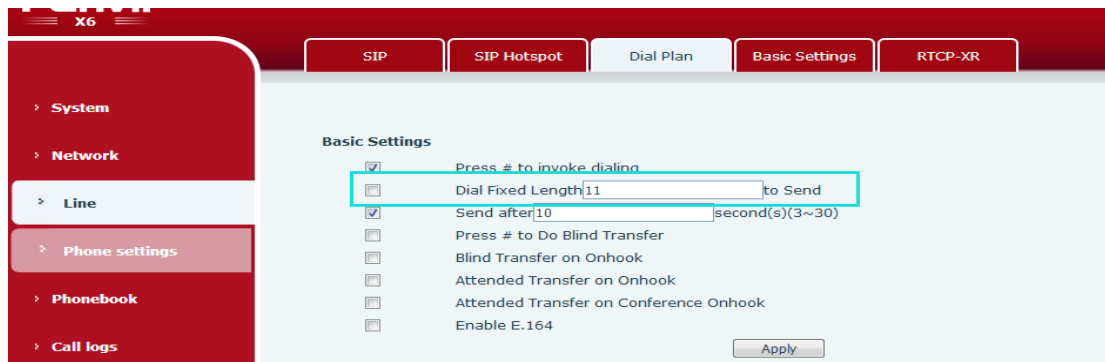
- Press # to do blind transfer: After entering the transferred-to number, press # to transfer the call to the third party.
- Blind transfer on onhook: If you hang up or finish the call by pressing the handfree key after entering a number, the call is transferred to the third party.
- Attended transfer on onhook: To activate this mode, hang up or press the handfree key. Then the call is transferred to the third party.
- Attended transfer on conference onhook: In a three-party call, when one party hangs up, the two parties can still keep the call.
- Enable E.164.

Press # to invoke dialing: A # symbol is suffixed to the dialed number.



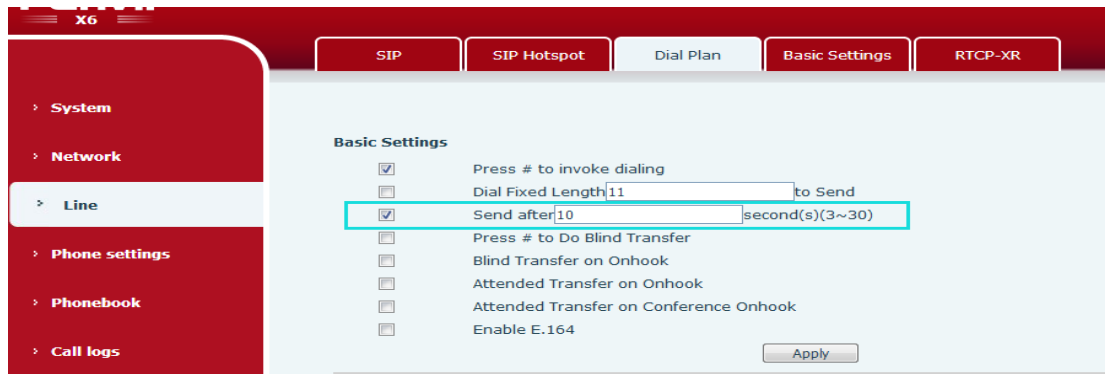
Configure the phone to suffix # when completing digit collecting.

Dial fixed length: The system captures a fixed length from the entered number.



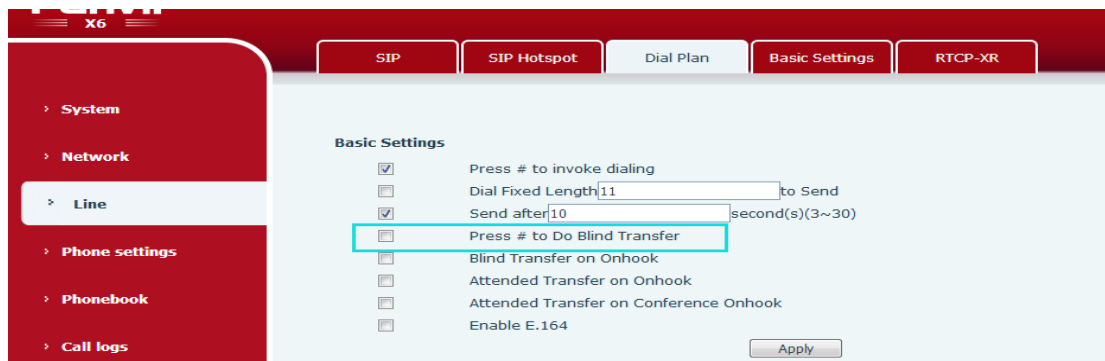
Configure the phone to collect digits with a fixed length. For example, if the fixed length is set to 11, the phone automatically dials out when 11 digits are entered.

Dial after timeout: When a specified timeout interval is expired, the system delivers the collected digits.



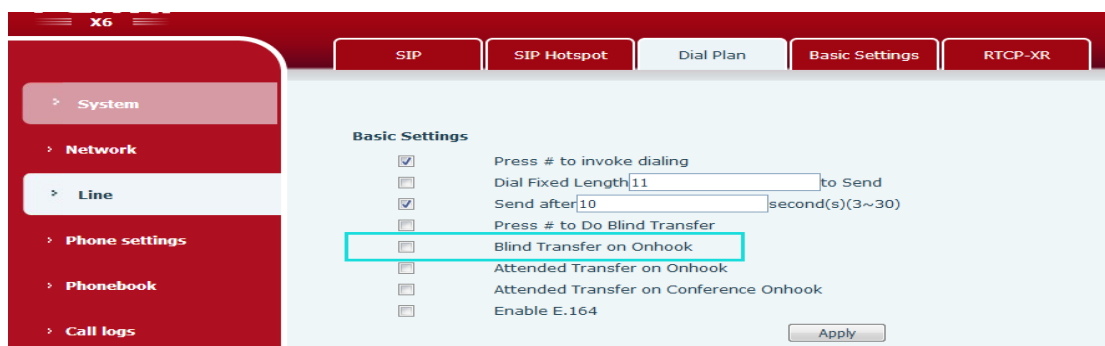
Configure the timeout interval, in seconds. For example, when the timeout is set to 10 seconds, if you do not enter the second digit 10 seconds after the first digit, the phone considers that you have completed dialing and delivers the entered digit.

Press # to do blind transfer



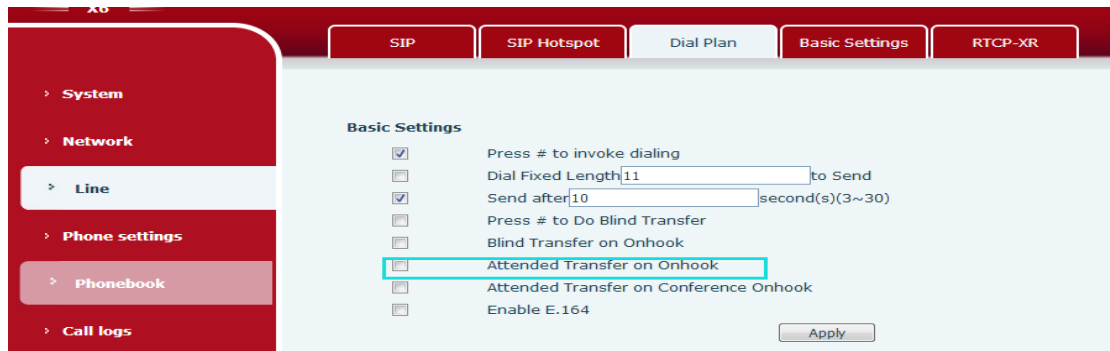
Select **Press # to Do Blind Transfer**, enter the number on the transfer dialing interface, and press # to perform blind transfer. If you do not select this option, the phone does not perform blind transfer after you press #.

Blind transfer on onhook



Select **Blind Transfer on Onhook**, enter the number on the transfer dialing interface, and hang up. Blind transfer is performed.

Attended transfer on onhook



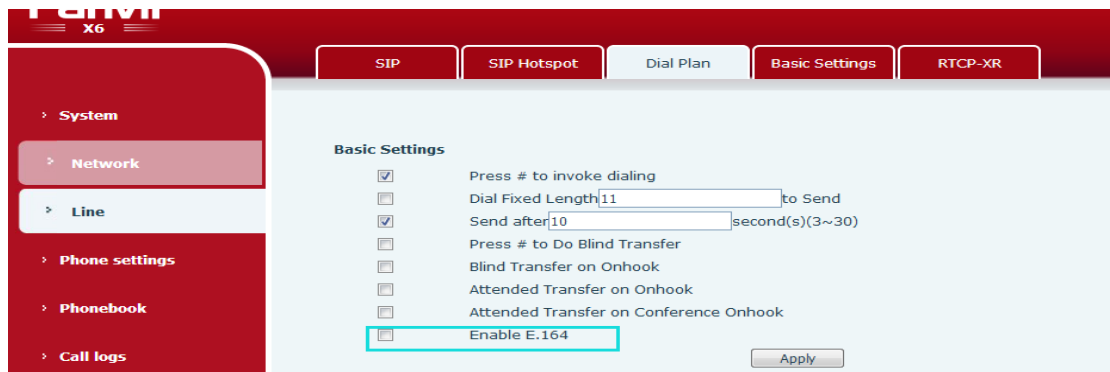
Select **Attended Transfer on Onhook**, enter the number on the transfer dialing interface, and initiate a call. When the call is answered, hang up. The call is transferred.

Attended transfer on conference onhook



When the test phone has set up a call with phone B and phone C, press the handfree key in the handfree mode, press the headset key in the headset mode, or hang up in handle mode. After the test phone hangs up, phone B and phone C are still in the call and they can display each other's phone number. Attended transfer is implemented.

Enable E.164.



Start with 0

2. 00: No processing for the numbers starting with 00 (normally, they are international numbers or 0086).
3. 010: For an 8-digit local number prefixing with 010, the phone automatically dials 11 digits.
4. 013, 015, and 018: They are mobile phone numbers. The phone dials 12 digits.
5. 02: The phone dials 11 digits, except for the numbers starting with 026 and 021.
6. 08

For the numbers starting with 0812/0813/0816/0817, 0825/0826/0827, 083, 085, 087, 0883/0886/0887/0888, and 089, the phone dials 11 digits (the numbers starting with 0850 and 0890/0899 are invalid).

For the numbers starting with 0898, the phone dials 12 digits.

7. Start with 03, 04, 05, 06, 07, and 09

7.1. Start with 03

(1) 031: The phone dials 11 digits, except for the numbers starting with 0311. For the numbers starting with 0311, the phone dials 12 digits.

(2) 0335/0349: The phone dials 11 digits.

(3) 035: The phone dials 11 digits.

(4) 037: The phone dials 11 digits, except for the numbers starting with 0371/0377/0379. For the numbers starting with 0371/0377/0379, the phone dials 12 digits.

(5) 039: The phone dials 11 digits, except for the numbers starting with 0390/0397. For the numbers starting with 0390/0397, the phone dials 11 digits.

7.2. Start with 04

(1) 041: The phone dials 11 digits, except for the numbers starting with 0411. For the numbers starting with 0411, the phone dials 12 digits.

(2) 0421/0427/0429

(3) 043: The phone dials 11 digits, except for the numbers starting with 0430 and 0431. The numbers starting with 0430 are invalid. For the numbers starting with 0431, the phone dials 12 digits.

(4) 045: The phone dials 11 digits, except for the numbers starting with 0450 and 0451. The numbers starting with 0450 are invalid. For the numbers starting with 0451, the phone dials 12 digits.

(5) 0464/0467/0468/0469: The phone dials 11 digits.

(6) 047: The phone dials 11 digits.

(7) 0482/0483: The phone dials 11 digits.

7.3. Start with 05

(1) 051: The phone dials 12 digits.

(2) 0523/0527: The phone dials 12 digits.

(3) 053: The phone dials 11 digits, except for the numbers starting with 0531 and 0532. For the numbers starting with 0531 and 0532, the phone dials 12 digits.

(4) 0543/0546: The phone dials 11 digits.

(5) 055: The phone dials 11 digits.

(6) 056: The phone dials 11 digits, except for the numbers starting with 0560/0567/0568/0569. The numbers starting with 0560/0567/0568/05 are invalid.

(7) 057: The phone dials 12 digits, except for the numbers starting with 0570/0572/0578. For the numbers starting with 0570, 0572, and 057, the phone dials 11 digits.

(8) 0580: The phone dials 11 digits.

(9) 059: The phone dials 11 digits, except for the numbers starting with 0590/0591/0595. The numbers starting with 0590 are invalid. For the numbers starting with 0591 and 0595, the phone dials 12 digits.

7.4. Start with 06

- (1) 0631/0632/0633/0634/0635: The phone dials 11 digits.
- (2) 0660/0662/0663/0668: The phone dials 11 digits.
- (3) 0691/0692: The phone dials 11 digits.

7.5. Start with 07

- (1) 0701/071/0722/0724/0728: The phone dials 11 digits.
- (2) 073: The phone dials 11 digits, except for the numbers starting with 0731/0732/0733. The numbers starting with 0732 and 0733 are invalid. For the numbers starting with 0731, the phone dials 12 digits.
- (3) 0743/0744/0745/0746: The phone dials 11 digits.
- (4) 075: The phone dials 11 digits, except for the numbers starting with 0754, 0755, and 0757. For the numbers starting with 0754, 0755, and 0757, the phone dials 12 digits.
- (5) 076: The phone dials 11 digits, except for the numbers starting with 0760, 0769, 0761, 0764, 0765, and 0767. For the numbers starting with 0760 and 0769, the phone dials 12 digits. The numbers starting with 0761/0764/0765/0767 are invalid.
- (6) 077/079: The phone dials 11 digits.

7.6. Start with 09

- (1) 090: The phone dials 11 digits, except for the numbers starting with 0900/0904/0905/0907. The numbers starting with 0900/0904/0905/0907 are invalid.
- (2) 091: The phone dials 11 digits, except for the numbers starting with 0910. The numbers starting with 0910 are invalid.
- (3) 093, 0941, 0943, 0951, 0952, 0953, 0954, 0955, and 097: The phone dials 11 digits.

Others

8. Start with 1, 4, 8, and 9

9. Start with 1

10. Start with 10: The phone dials out when 5 digits are entered, for example, 10086.

11. Start with 11: When the number starts with 111, the phone dials 5 digits. When the number does not start with 111, the phone dials 3 digits, for example, 110.

12. Start with 12: When the number starts with 123, the phone dials 5 digits, for example, 12315. When the number does not start with 123, the phone dials 3 digits, for example, 120 and 122.

13. When the number has 11 digits and starts with 13, 15, or 18 (mobile phone number), the length is not processed.

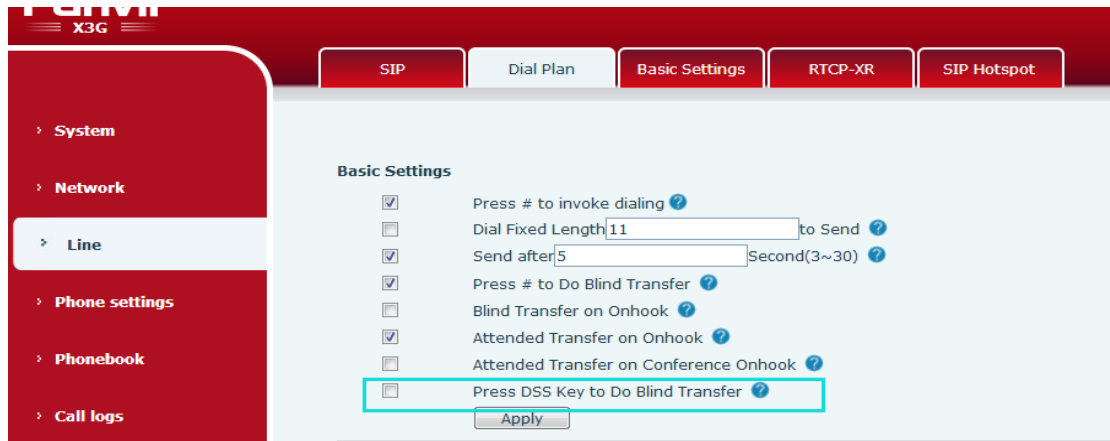
14. Start with 400 and 800: The phone dials out when 10 digits are entered (hotline).

15. When the number starts with 9 (except 999) and has 5 digits, the phone dials out. For the number starting with 999, the phone dials 9 digits.

16. The lengths of numbers starting with 2, 3, 5, 6, and 7 are not processed.

If both E164 and dial plan rules are configured, the condition that is met first takes effect.

Press DSS key to do blind transfer



After adding a number to the memory key and pressing the transfer key, you can press this key to transfer the call to the third party.

2.2 Customized Digit Collecting Rules

You can customize the dialing rules meeting your requirements and matching your server. The customized rules improve phone convenience and practicability. A maximum of 100 rules can be configured.

Parameter	Description
Calling number	Configure the calling numbers. Calling numbers can be configured in two modes: precise match and prefix match. In precise match, the phone calls with the IP address or configuration matching a number only when the number is identical with the entered number. In prefix match, the phone calls with the IP address or configuration matching a number as long as the first N digits are identical with the entered digits (prefix length). The prefix match numbers must be suffixed with a T, to be differentiated from precise match numbers. The longest length is 30 digits.
Destination	Configure the destination address. For a point-to-point call, enter the IP address of the remote party.
Port	Configure the protocol signaling port for the remote party. This is an optional parameter and the default value is 5060.
Alias	Configure alias. This is an optional parameter. It needs to be configured when the remote party's number has a prefix.
Suffix	Configure suffix. This is an optional parameter. The suffix is added to the dialed number.
Apply to Call	Choose to apply the rule to incoming or outgoing calls.
Match to Send	Choose Yes or No.
Deleted Length	Configured the replaced/deleted length of the entered number.

Parameter	Description
	This is an optional parameter. For example, if the value is set to 3, the first 3 digits of the number are deleted.
Note: There are four types of aliases. The alias must be configured together with Deleted Length. 1) add: xxx. Prefix xxx to a number. This reduces the number of digits you need to enter. 2) all: xxx. The entire number is replaced by xxx, to implement speed dial. 3) del: delete the first n digits of a number. N is set in Deleted Length. 4) rep: xxx. Replace the first n digits with xxx. N is set in Deleted Length.	Note: X indicates to match any digit. [] indicates the range of specified digits. It can be a range or multiple ranges separated by commas, or the list digits. . Indicates to match any length, including empty. Tn indicates that digit connecting will be finished after n seconds. N is mandatory, ranging from 0 to 9, in seconds. Tn must be the last two digits. If Tn is not configured, the system considers it as T0, that is, finish the digit collecting immediately. , indicates to send dial tone when digit collecting is finished.

2.2.1 Parameter Description

The parameters are as follows:

X56

Add dial plan:

Digit Map: Configure the dialing rules.

Apply to Call: Apply the rule to incoming or outgoing calls, or both.

Match to Send: Choose Yes or No. Generally, choose Yes.

Line: AUTO, SIP1, SIP2, SIP3...

Destination: If AUTO is selected for a line, you do not need to enter the destination for the line.

Set the destination for other lines.

Port: If AUTO is selected for a line, you do not need to enter the port for the line. Set the port for other lines.

Alias (Optional): The options include no alias, all, add, delete, and replace.

Phone Number: If no alias is selected for **Alias**, you do not need to fill in.

Length: If no alias is selected for **Alias**, you do not need to fill in.

Suffix: Configure the suffix.

Dial plan options: The added dial plans can be deleted and modified.

Customized dial plan list: The added plans are displayed in the list.

X34

Digit collecting rules:

You can delete or modify the added dialing rules.

Add Dial Peer:

Number: Configure a number.

Destination (Optional): Configure the destination.

Port (Optional): Configure the port.

Suffix (Optional): Configure the suffix.

Deleted Length (Optional): Set the length.

Dial Peer Menu:

The added dial peer can be deleted and modified.

Dial Peer List:

The added Dial Peers are displayed in the list.

Video Phone

Add dial plan:

Digit Map: Configure the dialing rules.

Apply to Call: Apply the rule to incoming or outgoing calls, or both.

Match to Send: Choose Yes or No. Generally, choose Yes.

Media: Select a call mode (preset, audio, or video).

Line: AUTO, SIP1, SIP2, SIP3...

Destination: If AUTO is selected for a line, you do not need to enter the destination for the line.

Set the destination for other lines.

Port: If AUTO is selected for a line, you do not need to enter the port for the line. Set the port for other lines.

Alias (Optional): The options include no alias, all, add, delete, and replace.

Phone Number: If no alias is selected for **Alias**, you do not need to fill in.

Length: If no alias is selected for **Alias**, you do not need to fill in.

Suffix: Configure the suffix.

Dial plan options: The added dial plans can be deleted and modified.

Customized dial plan list: The added plans are displayed in the list.

2.2.2 Alias

Alias use example:

You can create rules to simplify dialing. Several options are provided to configure the dialing rules.

The following are examples:

X34:

Example 1: Global replacement

This is a method of configuring speed dial. When you dial 32, the phone automatically replaces it with 833333. However, if you dial 322, the phone still delivers 322, instead of 8333332.

Add Dial Peer

Number	<input type="text" value="32"/>	?
Destination(Optional)	<input type="text"/>	?
Port(Optional)	<input type="text"/>	?
Alias(Optional)	<input type="text" value="all : 833333"/>	?
Suffix(Optional)	<input type="text"/>	?
Deleted Length(Optional)	<input type="text"/>	?

Example 2: Partial replacement

When you call a number in Beijing, you need to prefix the area code 010 to the number. After this function is configured, the number starting with 1 will be replaced with 010. For example, when you call a Beijing phone number 62213123, you only need to enter 162213123. The phone automatically changes the number to 01062213123.

Add Dial Peer

Number	<input type="text" value="1T"/>	?
Destination(Optional)	<input type="text"/>	?
Port(Optional)	<input type="text"/>	?
Alias(Optional)	<input type="text" value="rep:010"/>	?
Suffix(Optional)	<input type="text"/>	?
Deleted Length(Optional)	<input type="text"/>	?

Example 3: Adding prefix

You can configure the numbers starting with the specified digits. The phone will add the prefix to the entered number. For example, when you dial 9312, the phone delivers 0079312.

Add Dial Peer

Number	<input type="text" value="9T"/>	?
Destination(Optional)	<input type="text"/>	?
Port(Optional)	<input type="text"/>	?
Alias(Optional)	<input type="text" value="add : 007"/>	?
Suffix(Optional)	<input type="text"/>	?
Deleted Length(Optional)	<input type="text"/>	?

Exa

Example 4: Adding suffix

You can configure the numbers starting with the specified digits. The phone will add the suffix to the entered number. This configuration is used to match the server. For example, when you dial 1383322, the phone delivers 13833220088.

Add Dial Peer

Number	<input type="text" value="138T"/>	?
Destination(Optional)	<input type="text"/>	?
Port(Optional)	<input type="text"/>	?
Alias(Optional)	<input type="text"/>	?
Suffix(Optional)	<input type="text" value="0088"/>	?
Deleted Length(Optional)	<input type="text"/>	?

Example 5: Deleting prefix

If a dialed number matches the prefix, the phone automatically deletes the prefix. For example, when the prefix is set to 9, if you enter 98322, the phone delivers 8322. The digit 9 is deleted.

Add Dial Peer

Number	<input type="text" value="9T"/>	?
Destination(Optional)	<input type="text"/>	?
Port(Optional)	<input type="text"/>	?
Alias(Optional)	<input type="text" value="del"/>	?
Suffix(Optional)	<input type="text"/>	?
Deleted Length(Optional)	<input type="text" value="1"/>	?

X56 and video phone:

Rule :
[1-8]xxx
9xxxxxxxx
911
99T4
9911x. T4

Example 1: [1-8]xxx indicates that the 4-digit numbers ranging from 1000 to 8999 are delivered immediately when the 4 digits are collected.

Dial Plan Add

Digit Map:	<input type="text" value="[1-8]xxx"/>	?	Match to Send:	<input type="text" value="Yes"/>	?	
Apply to Call:	<input type="text" value="Outgoing Call"/>	?	Destination:	<input type="text"/>	Port:	<input type="text"/>
Line:	<input type="text" value="1234@SIP1"/>	?	Phone Number:	<input type="text"/>	Length:	<input type="text"/>
Alias(Optional):	<input type="text" value="No Alias"/>	?				
Suffix:	<input type="text"/>	?				

Example 2: 9xxxxxxxx indicates a number starting with 9. The number is delivered immediately when 8 digits are collected.

Dial Plan Add

Digit Map: ?

Apply to Call: ?

Line: ?

Alias(Optional): ?

Suffix: ?

Match to Send: ?

Destination: ?

Port: ?

Phone Number: ?

Length: ?

Example 3: 911 indicates the number. It is delivered immediately when the three digits are entered.

Dial Plan Add

Digit Map: ?

Apply to Call: ?

Line: ?

Alias(Optional): ?

Suffix: ?

Match to Send: ?

Destination: ?

Port: ?

Phone Number: ?

Length: ?

Example 4: 99T4 indicates that the number 99 is delivered 4 seconds after being entered.

Dial Plan Add

Digit Map: ?

Apply to Call: ?

Line: ?

Alias(Optional): ?

Suffix: ?

Match to Send: ?

Destination: ?

Port: ?

Phone Number: ?

Length: ?

Example 5: 9911x.T4 indicates a number of at least 5 digits starting with 9911. The number will be delivered 4 seconds after being entered. Other methods are unchanged.

Dial Plan Add

Digit Map: ?

Apply to Call: ?

Line: ?

Alias(Optional): ?

Suffix: ?

Match to Send: ?

Destination: ?

Port: ?

Phone Number: ?

Length: ?

Note 1: If two or more rules are configured in the list and all of them are met, the rule that is met first is matched.

Note 2: Each number can match only one customized dialing rule. If a number matches multiple rules, no rule will take effect. See the figure below:

"8,80x"
"8,8XX"