



Certificate of Compatibility

NEC Infrontia Limited is pleased to verify that:

Yealink - Enterprise IP Phone Range
has successfully met the standards for SIP Extension compatibility
with the NEC Infrontia products listed below.

| | |
|---------------------------------------|--|
| Test Completion Date: | 2 ND December 2009 |
| Manufacturer: | Yealink |
| Model: | Enterprise IP Phone Range |
| Firmware Version: | Program 6.2.0.40 |
| NEC Infrontia Platform Tested: | A Yealink declaration indicates compliance for the T12/T12P/T20/T20P/T22/T22P/T26/T26P/T28P based on NEC testing of the T28 ref SIPE0041 |
| Software Version: | V3.0 |
| Test Plan Version: | 1.1 |

Please refer to Configuration Notes below for further information.

SIP Configuration Notes – Yealink - Enterprise IP Phone Range

This guide should be used to configure the above device, for connection to an XN120 or Aspire or SV8100 system.

Recommended Software Versions

| | | | | | |
|----------------|-------|---------------|-------|----------------|-------|
| <i>Aspire:</i> | | <i>XN120:</i> | | <i>SV8100:</i> | |
| NTCPU | V7.60 | CPU | V8.00 | CPU | V3.00 |
| PCPro | V7.14 | PCPro | V8.00 | PCPro | V3.00 |
| VOIPU | V4.09 | VOIPU | V4.09 | | |

System Configuration

An unused extension number should be assigned to an unallocated port on the telephone system. (Refer to PRG11-02. The SIP device will register to this extension number.

If authentication is required, a password should be entered in PRG15-15-16. Authentication also needs to be enabled in PRG10-33-02.

CODEC settings can be changed in PRG84-19.

Further information is available in the Online Help.

SIP Extension Configuration

The Yealink - Enterprise IP Phone can be configured using the keys and LCD screen on the front of the phone. Alternatively, a web-based interface can be used.

The most common method of configuration is to use DHCP to issue the device with an IP address, and then use a Web Browser to configure the advanced settings.

Step 1 – Issue an IP address:

1. Connect the Yealink Enterprise IP Phone to a network with a DHCP server. (By default the telephone will try to obtain an address via DHCP)
2. To determine which address has been issued, press the Menu Key, select number 1 from the list, and press the enter key. The current IP address will be displayed on the LCD screen.

Step 2 – Configure the advanced settings:

1. Open Internet Explorer (or other Web Browser) and type the device's IP address into the address bar.
2. You will be prompted to Sign in. Sign in to the web admin menu using the username **admin** and the password **admin**.
3. A menu screen will now appear and you can configure the phone settings.
4. Note that most settings can be left at default – in most circumstances, only the items listed below from the Line menu need to be changed for the phone to register to the PBX.

In the example below, the Yealink Enterprise IP Phone is configured to register to the telephone system (172.16.0.10) on port UDP/5070, as extension 210. These settings should match the configuration of your telephone system.

Click on the **ACCOUNT** tab to get to this screen.

The screenshot shows the Yealink web interface with the 'Account' tab selected. The interface is divided into sections: 'Basic >>', 'Codecs >>', and 'Advanced >>'. The 'Basic >>' section contains the following configuration fields:

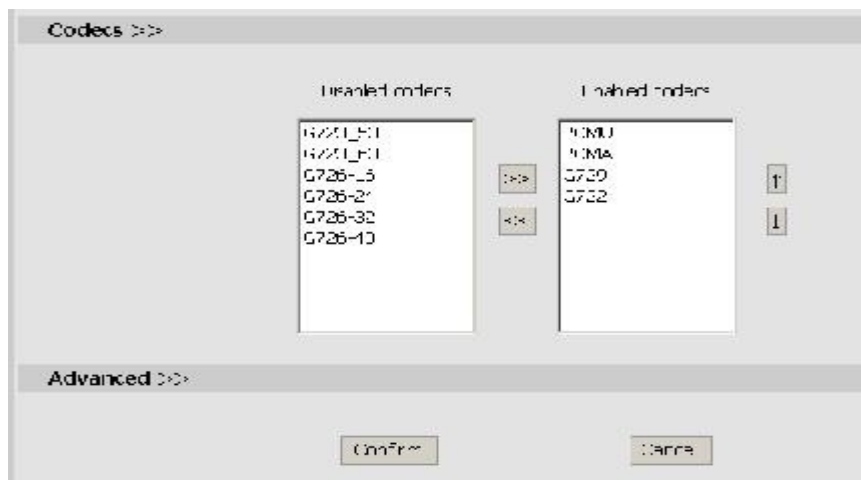
| | |
|------------------------------|---|
| Register Status | REGISTERED |
| Line Active | <input checked="" type="radio"/> On <input type="radio"/> Off |
| Label | |
| Display Name | Ext 210 |
| Register Name | 210 |
| User Name | 210 |
| Password | **** |
| SIP Server | 172.16.0.10 Port 5070 |
| Enable Outbound Proxy Server | Enabled |
| Outbound Proxy Server | 172.16.0.10 Port 5070 |
| Backup Outbound Proxy Server | Port 5060 |
| NAT Traversal | Disabled |
| STUN Server | 217.10.79.21 Port 10000 |
| Voice Mail | |
| Proxy Require | |

At the bottom of the 'Basic >>' section, there are 'Confirm' and 'Cancel' buttons.

SIP Server: Set this to the telephone system's IP address
Outbound Proxy: Set this to the telephone system's IP address
SIP User ID: This should be the devices extension number e.g. 210.
Authenticate ID: This should be the devices extension number e.g. 210.
Authenticate Password: This should only be required if a password has been set in PRG 15-15-16.
Name: This will appear on the display of the device.

CODEC Setup

If necessary you can change the order of the supported CODECs to match the telephone system through the **ACCOUNT** tab of the browser menu.



After making any changes, click on Confirm. The phone will always restart its self after any changes have been made.

Compatibility Overview

| | Compatible/Incompatible |
|---|--------------------------------|
| Registration - No Authentication | |
| Successful Registration | Compatible |
| Maintain Registration | Compatible |
| Registration Refresh | Compatible |
| Registration Failure | Compatible |
| De-registration | Compatible |
| Registration with Authentication | |
| Successful Registration | Compatible |
| Maintain Registration | Compatible |
| Registration Refresh | Compatible |
| Registration Failure | Compatible |
| De-registration | Compatible |
| Registration Failure 480 | Compatible |
| Call to PSTN/ISDN | |
| Call Setup | Compatible |
| Call Continuation | Compatible |
| Disconnect by Calling Party | Compatible |
| Disconnect by Called Party | Compatible |
| Call Cancel | Compatible |
| Call internal to Keytelephone | |
| Call Setup | Compatible |
| Call Continuation | Compatible |
| Disconnect by Calling Party | Compatible |
| Disconnect by Called Party | Compatible |
| Call Cancel | Compatible |
| Incoming call from PSTN/ISDN | |
| Call Setup | Compatible |
| Call Continuation | Compatible |
| Disconnect by Calling Party | Compatible |
| Disconnect by Called Party | Compatible |
| Call Cancel | Compatible |
| Incoming call from Keytelephone | |
| Call Setup | Compatible |
| Call Continuation | Compatible |
| Disconnect by Calling Party | Compatible |
| Disconnect by Called Party | Compatible |
| Call Cancel | Compatible |
| CODECs Disabling and Reordering | |
| Disabled CODEC outgoing call | Compatible |
| Disabled CODEC incoming call | Compatible |
| CODEC Order outgoing call | Compatible |
| CODEC order incoming call | Compatible |
| Sending digits during ringing | |
| Sending digits during ringing | Compatible |

| | |
|---|---------------------------|
| Sending digits during conversation | |
| Sending digits during conversation | Compatible |
| DTMF Relay | |
| Sending DTMF via RTP | Compatible |
| Flash hook/recall | |
| Hold & retrieve | Compatible |
| Consult Transfer (Flash hook/recall) | |
| Hold & Transfer (REFER) | Compatible |
| Blind Transfer (Flash hook/recall) | |
| Hold & Blind Transfer (REFER) | Compatible |
| Call to PSTN/ISDN Peer to Peer enabled | |
| Call Setup | Compatible |
| Call Continuance | Compatible |
| Disconnect by Calling Party | Compatible |
| Disconnect by Called Party | Compatible |
| Call Cancel | Compatible |
| Call internal to Keytelephone Peer to Peer enabled | |
| Call Setup | Compatible |
| Call Continuance | Compatible |
| Disconnect by Calling Party | Compatible |
| Disconnect by Called Party | Compatible |
| Call Cancel | Compatible |
| Sending digits during ringing Peer to Peer enabled | |
| Sending digits during ringing | Compatible |
| Sending digits during conversation Peer to Peer enabled | |
| Sending digits during conversation | Compatible |
| DTMF Relay Peer to Peer enabled | |
| Sending DTMF via RTP | Compatible |
| Flash hook/recall Peer to Peer enabled | |
| Hold & retrieve | Compatible |
| Consult Transfer (Flash hook/recall) Peer to Peer enabled | |
| Hold & Transfer (REFER) | Compatible |
| Blind Transfer (Flash hook/recall) Peer to Peer enabled | |
| Hold & Blind Transfer (REFER) | Compatible |
| Power out/kill process | |
| Unexpected SIP extension termination (Idle) | Compatible |
| Unexpected SIP extension termination (In conversation) | Compatible |
| Network Issues | |
| Disconnect the Ethernet cable X3 (During idle) | Incompatible – See Note 1 |
| Disconnect the Ethernet cable X3 (During conversation) | Compatible |
| Disconnect the Ethernet cable X4 (During idle) | Incompatible |
| Disconnect the Ethernet cable X4 (During conversation) | Compatible |
| Disconnect the Ethernet cable X2 (RTP stream) (During conversation) | Incompatible |

| | |
|---|--------------|
| CODEC Overview – See section 7 for detailed test results of CODEC compatibility. | |
| G.711 | Compatible |
| G.729 | Compatible |
| G.723 | Incompatible |

Note 1: If network connectivity is lost at any point the phone will need to be restarted.

There is a compatibility issue when using G.723, for this reason, do not set the codec to G.723 in PRG 84-19

Disclaimer:

NEC Infrontia Limited has performed Interoperability Testing with the Equipment listed above. The results of these tests proved satisfactory.

IMPORTANT: NEC Infrontia Limited cannot be held responsible for any future compatibility issues that may arise, as Manufacturers may make changes to their systems which are outside of NEC Infrontia's control.

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