

# Configuration Guide

**NERON NXP 5xx**  
**SIP PHONE**



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## Overview



**NXP 502**

- 128 x 64px backlit LCD display
- 2 SIP accounts
- 2 DSS/BLF keys
- HD Voice
- Opus Codec
- 2 x 10/100 Mbps Ethernet port
- PoE
- Stand with 3 adjustable angles
- 2.4GHz Wi-Fi
- Phone book (2000 records)
- BLF & Message waiting indicator (MWI)
- Voice mail, call park, call pickup
- 2 Line keys & 4 Soft Keys
- 7 feature keys: message, headsets, hold, mute, transfer, redial, hands-free speakerphone
- 5 Navigate Keys
- Volume +/-
- 1 x RJ9 Handset port
- 1 x RJ9 Headset port



**NXP 504**

- 2.8" 320x240-Pixel Color Display
- 4 SIP accounts
- 9 DSS/BLF keys
- HD Voice
- Opus Codec
- 2 x Gigabit Ethernet port
- 1x USB port
- PoE
- Stand with 3 adjustable angles
- 2.4GHz Wi-Fi
- Phone book (2000 records)
- BLF & Message waiting indicator (MWI)
- Voice mail, call park, call pickup
- 4 Line keys & 4 Soft Keys
- 7 feature keys: message, headsets, hold, mute, transfer, redial, hands-free speakerphone
- 5 Navigate Keys
- Volume +/-
- 1 x RJ9 Handset port
- 1 x RJ9 Headset port



**NXP 508**

- 3.5" 480x320 Pixel Color Display
- 8 SIP accounts
- 21 DSS/BLF keys
- HD Voice
- Opus Codec
- 2 x Gigabit Ethernet port
- 1x USB port
- PoE
- Stand with 3 adjustable angles
- 2.4GHz Wi-Fi
- Phone book (2000 records)
- BLF & Message waiting indicator (MWI)
- Voice mail, call park, call pickup
- 8 Line keys & 4 Soft Keys
- 7 feature keys: message, headsets, hold, mute, transfer, redial, hands-free speakerphone
- 5 Navigate Keys
- Volume +/-
- 1 x RJ9 Handset port
- 1 x RJ9 Headset port



**NXP 510**

- 4.3" 480x272 Pixel Color IPS screen
- 10 SIP accounts
- Up to 64 DSS/BLF keys
- HD Voice
- Opus Codec
- 2 x 10/100 Mbps Ethernet port
- 1x USB 2.0 port
- PoE
- Stand with 3 adjustable angles
- 2.4GHz Wi-Fi inbuilt
- 5GHz Wi-Fi using Wi-Fi dongle
- Phone book (2000 records)
- BLF & Message waiting indicator (MWI)
- Voice mail, call park, call pickup
- 10 Line keys (touchable) & 4 soft keys (touchable)
- 3 feature keys: headset, mute, hands-free speakerphone
- Volume +/-
- 1 x RJ9 Handset port
- 1 x RJ9 Headset port

## Hardware Interface



RJ11 Handset

RJ11 Headset



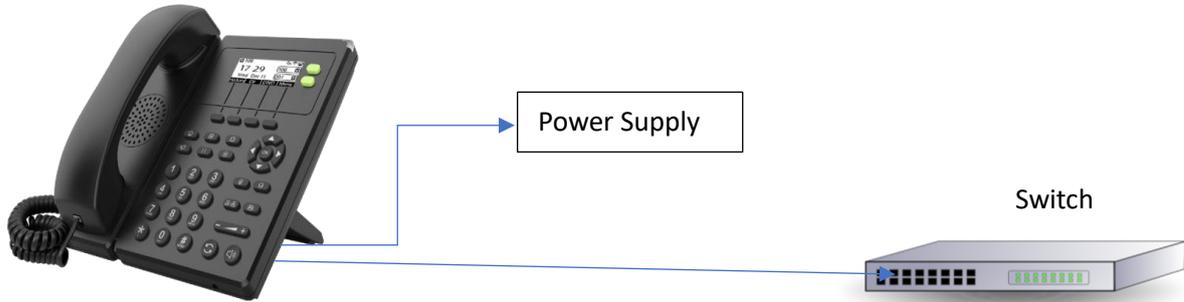
Power Socket

RJ45 to connect with direct PC

RJ45 WAN port to connect

NO.	Name	Description
1	Power Socket	For external Power Supply Adaptor 5V-1A
2	LCD Display	To Check Status and manual settings
3	PC Port	RJ45- Use to Connect direct with PC
4	PoE Port	RJ45- Use to turn on the device using PoE switch or to connect with network through LAN cable
5	Headset Port	RJ11- To use external Headsets
6	Handset Port	RJ11- To connect Handset
7	Wi-Fi	Use to connect WiFi network
8	Manual RESET	To reset device on factory default
9	GUI RESET	To reset device on factory default

## Device installation

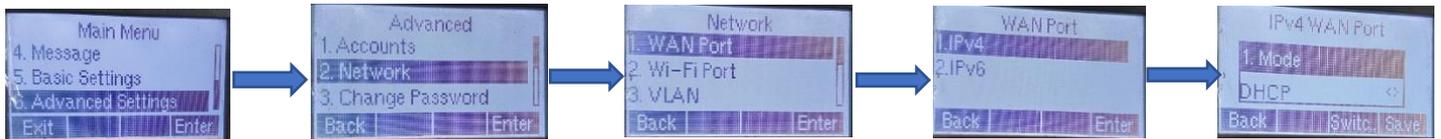


- Connect Power adaptor with Power socket.
- Connect Cat5/Cat6 LAN Cable with WAN port with your network or Turn on WiFi and set the network mode (IPv4 WAN Port) on DHCP.

## Manual Network Setting

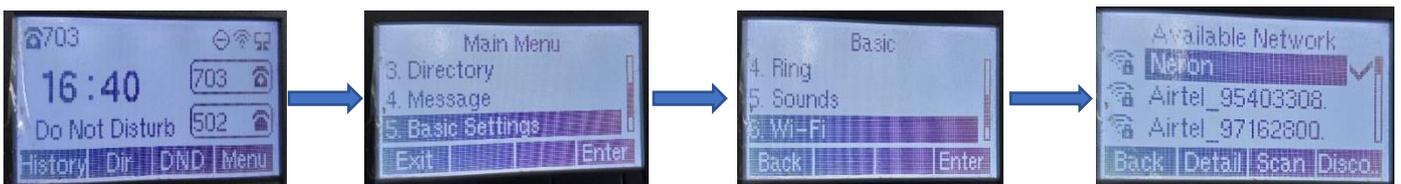
### 1. DHCP:

Menu >> Advanced Setting >> Password(admin) >> Network >> WAN Port >> IPv4 >> Mode(DHCP)



### 2. Wi-Fi:

Menu >> Basic Settings >> Wi-Fi (On) >> Available Network



**[ Note: To select Up-Down or On/Off use navigation key ]**

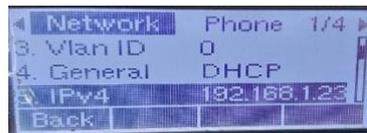
## Login with GUI

### 1. IP address:

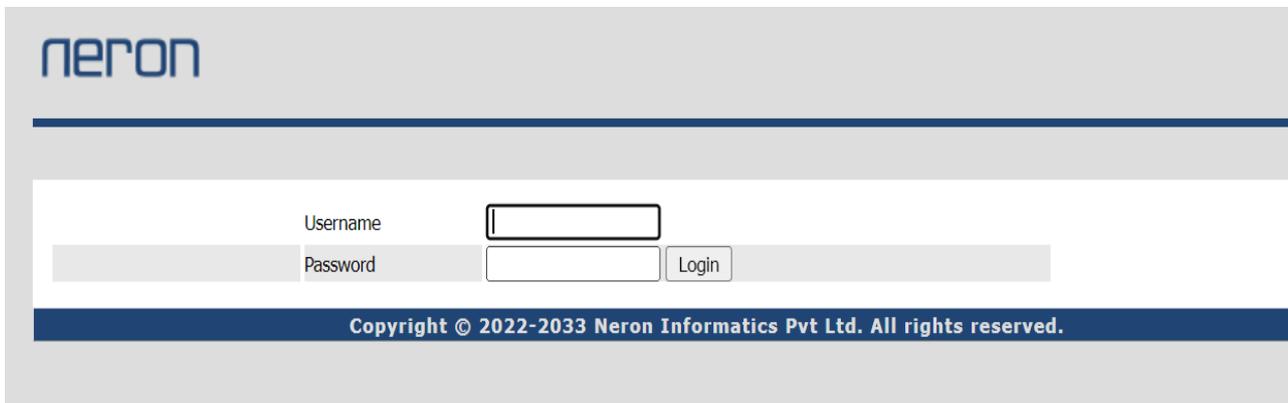
To Login GUI first find the IP address of the device.

Path:

Menu >> My Status >> IPv4(IP address)

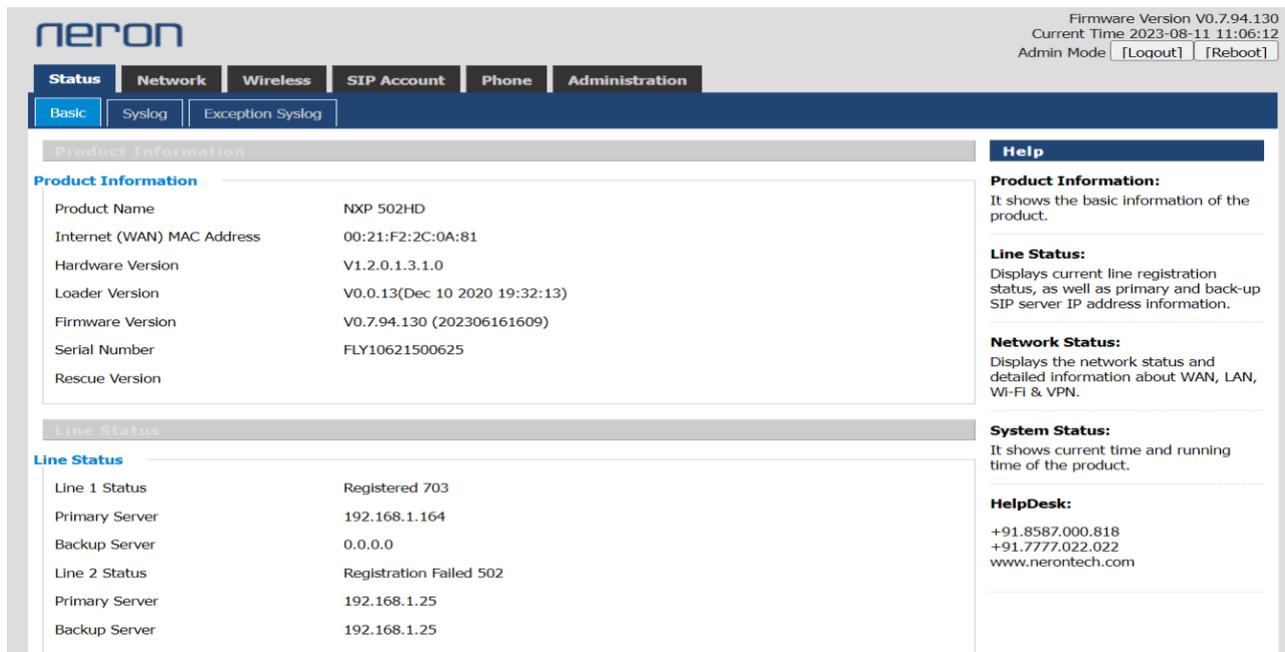


- Now go to browser and browse device IP address and the Login page will be open.
- Enter the username “admin” and password “admin”.



The login page features the Neron logo at the top left. Below it, there are two input fields: 'Username' and 'Password'. A 'Login' button is positioned to the right of the password field. At the bottom of the page, a copyright notice reads: 'Copyright © 2022-2033 Neron Informatics Pvt Ltd. All rights reserved.'

## Status



The status page displays the Neron logo and the following information:

- Firmware Version V0.7.94.130
- Current Time 2023-08-11 11:06:12
- Admin Mode [Logout] [Reboot]

The page is divided into several sections:

- Navigation:** Status, Network, Wireless, SIP Account, Phone, Administration.
- Basic:** Syslog, Exception Syslog.
- Product Information:**

Product Name	NXP 502HD
Internet (WAN) MAC Address	00:21:F2:2C:0A:81
Hardware Version	V1.2.0.1.3.1.0
Loader Version	V0.0.13(Dec 10 2020 19:32:13)
Firmware Version	V0.7.94.130 (202306161609)
Serial Number	FLY10621500625
Rescue Version	
- Line Status:**

Line 1 Status	Registered 703
Primary Server	192.168.1.164
Backup Server	0.0.0.0
Line 2 Status	Registration Failed 502
Primary Server	192.168.1.25
Backup Server	192.168.1.25
- Help:**
  - Product Information:** It shows the basic information of the product.
  - Line Status:** Displays current line registration status, as well as primary and back-up SIP server IP address information.
  - Network Status:** Displays the network status and detailed information about WAN, LAN, Wi-Fi & VPN.
  - System Status:** It shows current time and running time of the product.
  - HelpDesk:** +91.8587.000.818, +91.7777.022.022, www.nerontech.com

## Network Setting with GUI

### 1. Network mode DHCP/Static:

#### DHCP:

DHCP- IP Address, Subnet mask and Default Gateway will be issued by the local DHCP Server.

Path:

Network >> WAN >> WAN IP Mode >> Select DHCP >> Save

The screenshot shows the 'WAN' configuration page in the Neron GUI. The 'WAN IP Mode' is set to 'DHCP'. The 'DHCP Server' is set to 'Static'. The 'Request broadcast replies' option is set to 'DHCP'. The 'MAC Address Clone' is set to 'Disable'. The 'DNS Mode' is set to 'Manual'. The 'Primary DNS' and 'Secondary DNS' fields are empty.

#### Static IP:

Set the IP Address, Subnet Mask and Default Gateway provided by your ISP.

Path:

Network >> WAN >> WAN IP Mode >> Select Static >> Save

The screenshot shows the 'WAN' configuration page in the Neron GUI. The 'WAN IP Mode' is set to 'Static'. The 'Static IP' is set to '192.168.1.23'. The 'Subnet Mask' is set to '255.255.255.0'. The 'Default Gateway' is set to '192.168.1.1'. The 'DNS Mode' is set to 'Manual'. The 'Primary DNS' is set to '192.168.1.1'. The 'Secondary DNS' field is empty. A 'Help' sidebar is visible on the right, providing information about WAN IP Mode, DHCP, PPPoE, NAT, and Bridge.

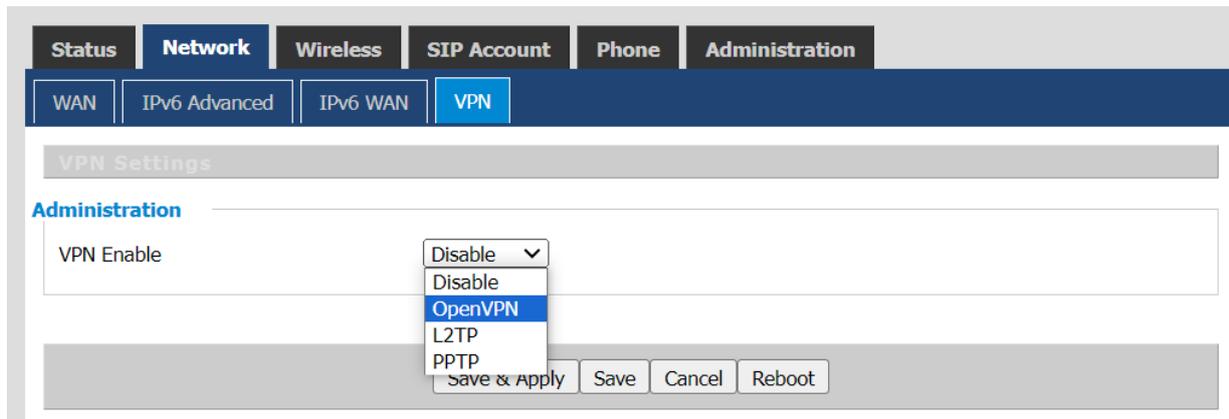
## 2. VPN:

It protects its users by encrypting their data and masking their IP address. This hides their browsing activity, identity and location, allowing for greater privacy and autonomy.

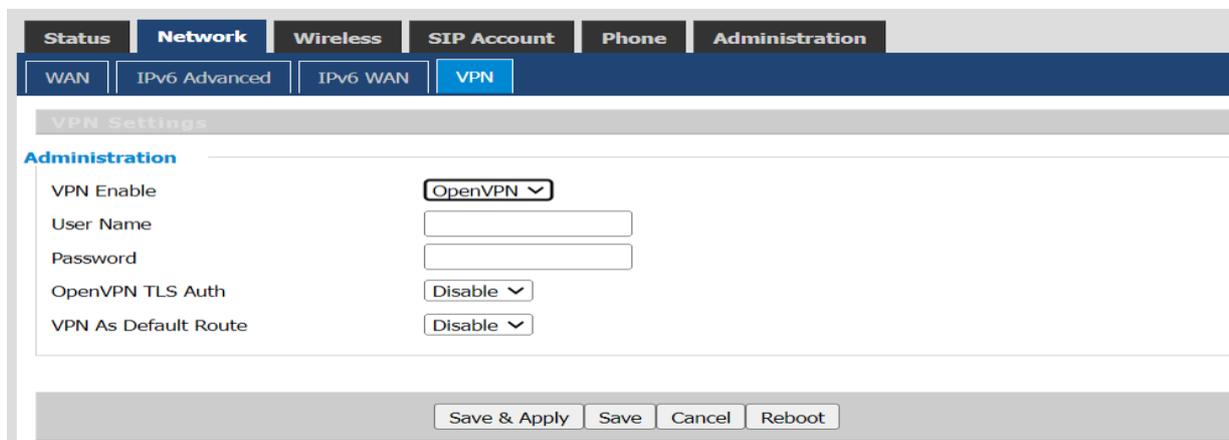
PPTP/L2TP- The Initial Service IP is the IP address of the server proving PPTP/L2TP services.

Path:

Network >> VPN >> OpenVPN >> Save & Apply



- Add user name and password to add VPN.



## Wireless Setting with GUI

### 1. Wireless:

Wireless is used to maintain Wi-Fi settings.

Path:

Wireless >> Wireless >> Wireless Connection

- To connect Wi-Fi with GUI go to Wireless Connection and select the Wi-Fi.
- Then click on connect and Save & Apply.

**Wireless Connection**

Wireless Connection

Wireless Connection

Connection Status: Connected (AP: Neron)

SSID	Authentication	Encryption	Status
Neron	WPA1PSK/WPA2PSK	TKIP/AES	
Marqual 2	WPA1PSK/WPA2PSK	TKIP/AES	
Ehook	WPA1PSK/WPA2PSK	TKIP/AES	
JTIL	WPA1PSK/WPA2PSK	TKIP/AES	
HP-Print-69-LaserJet Pro MFP	OPEN	NONE	
Airter_Techkraft	WPA1PSK/WPA2PSK	TKIP/AES	
Imv_32	WPA1PSK/WPA2PSK	TKIP/AES	
NETSUTRA_AIRTEL	WPA1PSK/WPA2PSK	TKIP/AES	
DIRECT-D1-HP Smart Tank 510	WPA2PSK	AES	
94108DRC	WPA1PSK/WPA2PSK	TKIP/AES	
DRC 94108	WPA1PSK/WPA2PSK	TKIP/AES	

Buttons: Connect Refresh Add

Buttons: Save Cancel Reboot

# Account Configuration

## 1. SIP Account:

SIP Account is used to register the account. We can register multiple accounts according to the model of NXP IP Phone.

Path:

SIP Account >> Linen 1 / Line 2

**Subscriber Information**

- To add Account go to SIP Account then click on Line 1 or Line 2.
- Now enable the line and fill the subscriber information (Display name, Phone number, Account and Password)

**SIP Server 1/ Proxy Server**

- After that add **Proxy server** and **outbound server**.

Status	Network	Wireless	SIP Account	Phone	Administration
Line 1	Line 2	SIP Settings	VoIP QoS	Ring	
<b>Basic</b>					<b>Help</b>
<b>Register Status</b>					<b>Basic:</b> Set the by you Numbe
Register Status	Registered				
<b>Basic Setup</b>					<b>Audio:</b> Select I match setting:
Line Enable	Enable				
<b>Subscriber Information</b>					<b>Suppl Subsc</b> Call We the use coming
Display Name	703	Phone Number	703		
Account	703	Password	.....		
<b>SIP Server 1</b>					<b>Prox</b> Differe be con when t interco a SIP s
Proxy Server	192.168.1.164	Proxy Port	5060		
Register Refresh Interval (sec)	1800	Transport	UDP		
<b>Proxy Server</b>					<b>Advan</b> Advanc
Outbound Server	192.168.1.164	Outbound Port	5060		
Backup Outbound Server		Backup Outbound Port	5060		
Allow DHCP Option 120 to Override SIP Server	Enable				

## Codec Setup

- Now go to codec setup and set the codec configuration according to the requirement.
- Recommended alaw/ulaw codec.

Audio Configuration			
<b>Codec Setup</b>			
Audio Codec Type 1	G.711U	Audio Codec Type 2	G.711A
Audio Codec Type 3	G.729	Audio Codec Type 4	G.722
Audio Codec Type 5	OPUS	Audio Codec Type 6	iLBC
Audio Codec Type 7	G.723	G726 Payload	110
G.723 Coding Speed	5.3k bps	Packet Cycle (ms)	20
Echo Cancel	Enable	Use First Matching Vocoder in 200OK SDP	Disable
Auto Gain Control	Disable	Packet Cycle Follows Remote SDP	Disable
Codec Priority	Remote		

## SIP Advanced Setup

- Now come to SIP Advance setup and go to Remove Last Reg select enable or disable as per requirement.
- Now go to SIP Advance setup and "Enable" Sync Clock Time.
- Save & Apply.

**SIP Advanced Setup**

Domain Name Type	Enable	Carry Port Information	Disable
Signal Port	51455	DTMF Type	RFC2833
RFC2833 Payload (>=96)	101	Call-ID Prefix	
Caller ID Header	FROM	Remove Last Reg	Disable
Session Refresh Time (sec)	0	Min Session Timer(sec)	90
Refresher	UAC	Enable SIP OPTIONS	Enable
Initial Reg With Authorization	Enable	Reply 182 On Call Waiting	Disable
Primary Server Detect Interval	0	Max Detect Fail Count	3
NAT Keep-alive Interval (10-60s)	15	Anonymous Call	Disable
Anonymous Call Block	Disable	Proxy DNS Type	A Type
Use OB Proxy in Dialog	Disable	Complete Register	Disable
Enable Reg Subscribe	Disable	Reg Subscribe Interval (sec)	0
Dial Prefix		User Type	IP
Hold Method	ReINVITE	Request-URI User Check	Enable
Only Recv Request From Server	Enable	Server Address	
RPort		VPN	Disable
SIP Encrypt Type	Disable	RTP Encrypt Type	Disable
SRTP	Disable	SRTP Encryption	AES_CM & ARIA_CM
Country Code		Remove Country Code	Disable
Tel URL	Disable	Use Random SIP Port	Enable
Min Random SIP Port	50000	Max Random SIP Port	60000
Prefer Primary SIP Server	Disable	Hold SDP Attribute Inactive	Disable
BLF List URI		BLF List Pickup Code	
Remove All Bindings	Disable	Enable SIP 100REL	Disable
Conference Type	Local Conference	Conference URI	
VAD&CNG	Disable	Distinctive Ring Tones	Disable
Alert Info Tone	Disable	Share Line Enable	Disable
Return Code When Refuse	486(Busy He	Return Code When DND	480(Tempora
User-To-User	Disable	UUI Content	
VQ RTCP-XR Collector name		VQ RTCP-XR Collector address	
VQ RTCP-XR Collector port		Allow IP Calls	Disable
SIP Send MAC	Disable	SIP Send Line	Disable
Eary Media Support	Enable	P-Early Medai Support	Enable
SIP Remote-Party-ID	Disable	SIP Session ID Support	Disable
Missed Call Log	Enable	Sync Clock Time	Enable
Callee ID Header	PAID-RPID	Use Connection Port	Enable
SIPS Scheme Enable When TLS	Disable		
SDP UNENCRYPTED SRTPC Enable	Enable		

## Phonebook Setting

### 1. Phone:

Line Key is used to use different features on different Lines.

The function of a key can be changed according to different needs.

Path:

Phone >> Line Key >> Line Key1/Line Key2 >> Save

Admin Mode | Logout | Reboot

Status | Network | Wireless | SIP Account | **Phone** | Administration

Preferences | Programmable Key | **Line Key** | Dial Rule | Phone Book | Call Log | Action URL | Web Dial | Multicast IP

Deskay

Key	Type	Line	Value	Label	Extension
Line Key1	BLF	Line1	702	702	702
Line Key2	Line	Line2			

Save Cancel Reboot

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**Help**

**SpeedDial:**  
You can configure this key as a simplified speed dial key. This key function allows you to easily access the most frequently dialed numbers.

**EventType:**  
The function of a key can be changed according to different needs.

- N/A
- History
- Local Group
- Directory
- LDAP
- Menu
- DND
- SpeedDial
- Status
- Line**
- XML Browser
- BLF
- BLF List
- Paging
- Paging List
- Intercom
- Pick Up
- Group Pick Up
- Call Park
- Retrieve Park

## Phone Book

Path:

Phone >> Phone Book >> Save & Apply

[Phone Book Upload & Download: Excel or CSV file can be uploaded or Downloaded here.]

**Call Log** shows all call details like redial list, Answered Calls, Missed Calls.

Path:

Phone >> Call Log

## Redial List

Index	Local Number	Remote Number	Start Time	Duration
1	702	111	01/02 04:19	00:00:03
2	502	111	01/02 04:19	00:00:07
3	502	501	01/03 09:48	00:00:18
4	702	501	01/03 10:16	00:00:00
5	502	501	01/03 10:17	00:00:22
6	702	8001	01/03 11:54	00:00:05

## Answered Calls

Index	Local Number	Remote Number	Start Time	Duration
1	502	509	01/02 04:18	00:00:10
2	502	111	01/02 04:24	00:00:06
3	502	509	01/02 04:29	00:00:06
4	502	111	01/02 04:35	00:00:09
5	502	501	01/03 09:46	00:01:10

## Missed Calls

Missed Calls				
Index	Local Number	Remote Number	Start Time	Duration
1	702	+91 [REDACTED]	01/04 08:05	00:00:00
2	702	+91 [REDACTED]	01/04 08:06	00:00:00
3	702	701	01/04 09:04	00:00:00
4	702	8001	06/30 18:53	00:00:00
5	702	703	07/03 15:13	00:00:00

# Firmware and Admin

## 1. Administration:

### Management

Path:

Administration >> Management >> Save & Apply

- In **Save Config File** we can upload or Download configuration file backup and we can export local log also from **Local Log**.

### Save Config File

The screenshot shows the 'Administration' menu with sub-items: Management, Firmware Upgrade, Certificates, Provision, TR-069, and Diagnosis. The 'Management' sub-menu is active, showing the 'Save Config File' section. This section includes 'Config File Upload & Download' with a 'Local File' area containing 'Choose File' (No file chosen), 'Upload', and 'Download' buttons. Below it is the 'Local Log' section with an 'Export Local Log' button and a 'Download' button. On the right side, there is a sidebar with a 'Home' icon and a partially visible 'Tim' section.

- **Administrator Settings** used to change user name and password.
- **Language** can be change here.

## Administrator Settings

### Administrator Settings

#### Password Reset

User Type	Admin User
New User Name	admin
New Password	<input type="text"/> (The maximum length is 25)
Confirm Password	<input type="text"/>

#### Language

Language	English
----------	---------

- Enable **NTP** to set time and date. Select **Time Format** and **Time Zone** then set the **Primary NTP Server** and **Secondary NTP Server**, now Save & Apply.

## Time/Date Setting

### Time/Date Setting

#### NTP Settings

NTP Enable	Enable
Option 42	Disable
Current Time	2023 - 08 - 17 . 11 : 52 : 27
Sync with host	Sync with host
Time Format	24 Hour
Time Zone	(GMT+05:30) India
Daylight Saving Time	<input checked="" type="radio"/> Disable <input type="radio"/> Enable <input type="radio"/> Auto
Primary NTP Server	95.216.144.226
Secondary NTP Server	in.pool.ntp.org
NTP synchronization (1 - 1440min)	60

- To Reset the device just Click on Factory Default.

## Factory Default

### Factory Default

Reset to Factory Default

## Firmware Upgrade

Path:

Administration >> Firmware Upgrade >> Upgrade

- Click on the **Browse** button to select the firmware file to be uploaded to the router.
- Click the Upgrade button to begin the upgrade process.
- Once begun, the Upgrade process must not be interrupted.

Status	Network	Wireless	SIP Account	Phone	Administration
Management	Firmware Upgrade	Certificates	Provision	TR-069	Diagnosis

Firmware Management

**Action When Upgrade**

remove current configuration

**Firmware Upgrade**

Local Upgrade  No file chosen

# NERON NXP 5xx SIP PHONE

Support Portal	:	<a href="http://www.voipindia.com">www.voipindia.com</a>
Email Helpdesk	:	<a href="mailto:support@nerontech.com">support@nerontech.com</a>
	:	<a href="mailto:support@voicnetworks.com">support@voicnetworks.com</a>
Customer Helpdesk No.	:	+91.9999.121.666
Partner Helpdesk No.	:	+91.8587.000.818
Sales Desk No.	:	+91.7777.022.022