

USER MANUAL

S9922L Series Mobile Router

CONTENT

GENERAL CONFIGURATION.....	3
1. WAN SETTINGS.....	4
2. NAT SETTINGS.....	8
3. LAN SETTINGS.....	8

GENERAL CONFIGURATION

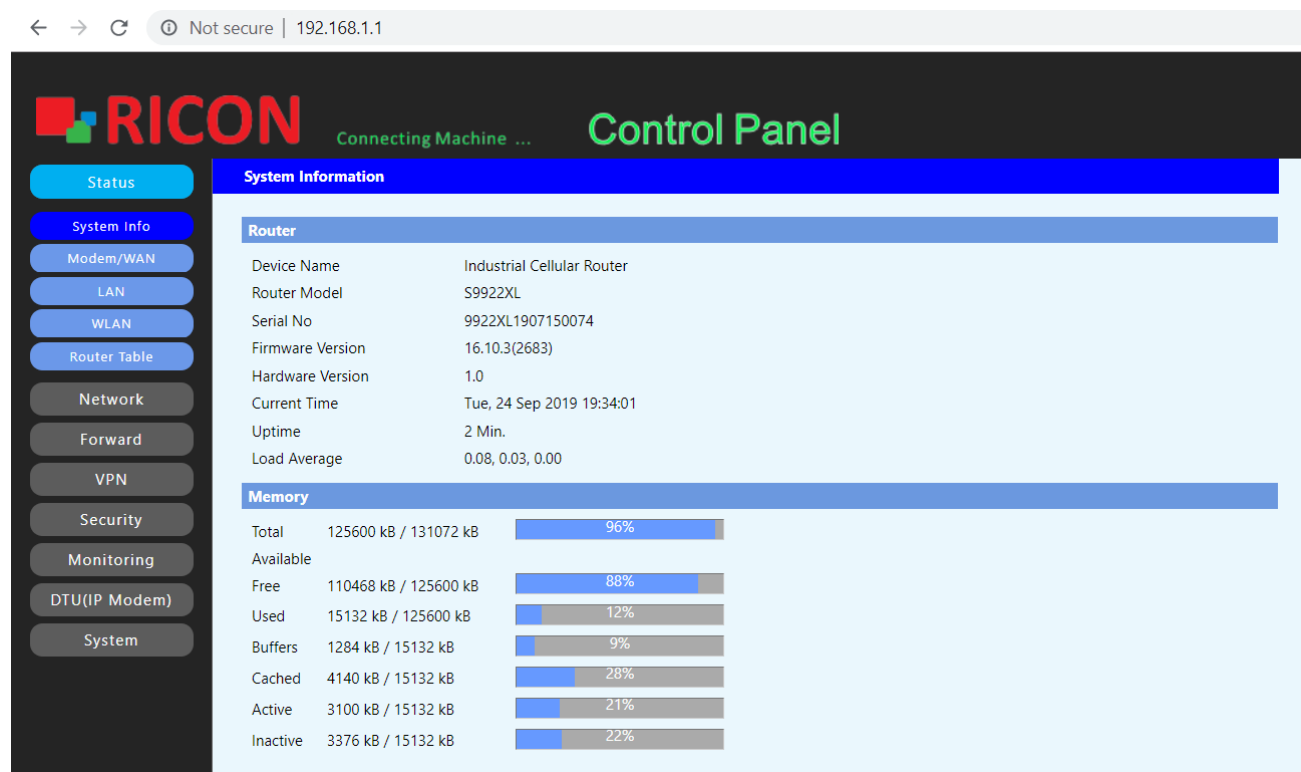
Use Ethernet port directly connected to S9922L Router and computer, or transferred by a switch.

This method will temporarily interrupt the communication between the computer under configuration and LAN, and the specific parameter configuration is shown as below:

IP address: 192.168.1.* (*indicates any integral between 2 to 254)

Subnet mask: 255.255.255.0

Default gateway: 192.168.1.1



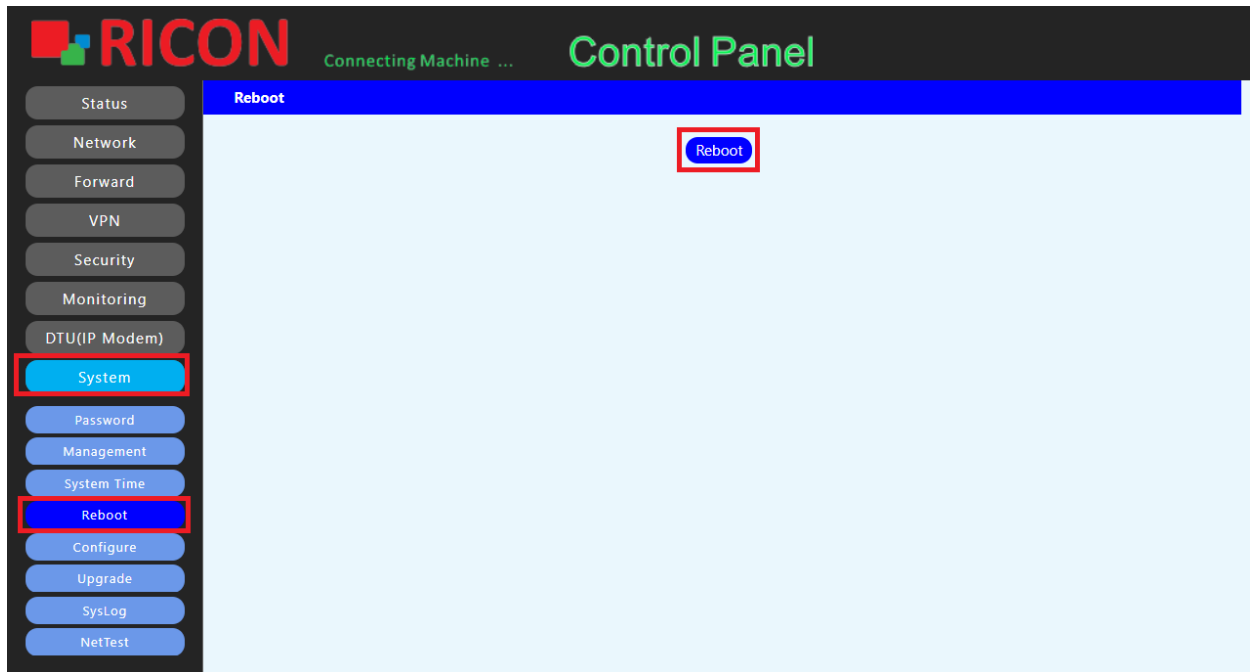
The screenshot shows the RICON Control Panel interface. The browser address bar displays "Not secure | 192.168.1.1". The page title is "RICON Control Panel". The left sidebar contains navigation buttons for Status, System Info, Modem/WAN, LAN, WLAN, Router Table, Network, Forward, VPN, Security, Monitoring, DTU(IP Modem), and System. The main content area is titled "System Information" and is divided into two sections: "Router" and "Memory".

Router	
Device Name	Industrial Cellular Router
Router Model	S9922XL
Serial No	9922XL1907150074
Firmware Version	16.10.3(2683)
Hardware Version	1.0
Current Time	Tue, 24 Sep 2019 19:34:01
Uptime	2 Min.
Load Average	0.08, 0.03, 0.00

Memory		
Total	125600 kB / 131072 kB	96%
Available		
Free	110468 kB / 125600 kB	88%
Used	15132 kB / 125600 kB	12%
Buffers	1284 kB / 15132 kB	9%
Cached	4140 kB / 15132 kB	28%
Active	3100 kB / 15132 kB	21%
Inactive	3376 kB / 15132 kB	22%

Follow the steps below to reboot the device and single click the **Reboot** icon.

System > Reboot > Reboot



1. WAN SETTINGS

S9922L Router core function is connecting to a desired network (corporate or internet) by cellular connection. Usually 3G/LTE network bandwidth is (Depending on the operators' infrastructure) between 1~300Mbps

Network > Modem/WAN

The screenshot shows the RICON web interface for an S9922L Series Mobile Router. The browser address bar shows 'http://192.168.1.1'. The interface includes a sidebar with navigation options: Status, System Info, Modem/WAN, LAN, WLAN, Router Table, Network (highlighted with a red box), Forward, VPN, Security, Monitoring, DTU(IP Modem), and System. The main content area displays 'System Information' for the router, including device name, model, serial number, firmware and hardware versions, current time, uptime, and load average. Below this is a 'Memory' section with a table of memory usage statistics and progress bars.

Router		
Device Name	Industrial Cellular Router	
Router Model	S9922XL	
Serial No	9922XL1907150074	
Firmware Version	16.10.3(2683)	
Hardware Version	1.0	
Current Time	Tue, 24 Sep 2019 19:34:57	
Uptime	3 Min.	
Load Average	0.03, 0.02, 0.00	

Memory		
Total	125600 kB / 131072 kB	96%
Available		
Free	110468 kB / 125600 kB	88%
Used	15132 kB / 125600 kB	12%
Buffers	1284 kB / 15132 kB	9%
Cached	4140 kB / 15132 kB	28%
Active	3100 kB / 15132 kB	21%
Inactive	3376 kB / 15132 kB	22%

A 'Sign in' dialog box is overlaid on the right side of the interface, showing the URL 'http://192.168.1.1', a warning 'Your connection to this site is not private', and input fields for 'Username' (admin) and 'Password' (masked with dots). 'Sign in' and 'Cancel' buttons are at the bottom of the dialog.

Single click “Modem/WAN” to access modem parameter settings section.

Single click “save” icon to finish.

Modem/WAN

Link Backup

Backup Mode: Main First(Automatic return to Main) Mutual Preparation Mode
 Link Fail to Restart: 10minutes (0: Disabled)

Modem/WAN - Main Link

Connection Type: 2G/3G/4G-PPP
 SIM Switch/Reset: 90Sec.
 SIM Backup: Enable Disable

Main SIM

SIM1 SIM2

SIM 1:

User Name: [Redacted] Unmask
 Password: [Redacted] Unmask
 Dial String: *99***1# (UMTS/3G/3.5G) Custom [Redacted]
 APN: 3gnet
 PIN: [Redacted] Unmask PIN Protection
 Network Mode: Auto

SIM 2:

User Name: [Redacted] Unmask
 Password: [Redacted] Unmask
 Dial String: *99***1# (UMTS/3G/3.5G) Custom [Redacted]
 APN: 3gnet
 PIN: [Redacted] Unmask PIN Protection
 Network Mode: Auto

Others:

Authentication: PAP CHAP MS-CHAP MS-CHAPv2
 Fixed WAN IP: Enable Disable
 Fixed WAN GW Address: Enable Disable
 Force reconnect: Enable Disable
 Connect Fail: 1 TimesSwitch
 Dial Fail to Restart: 10minutes (0: Disabled)
 Keep Alive: ICMP+
 Keep Alive Server IP: [Redacted]
 Keep Alive Server IP2: [Redacted]
 Keep Alive Interval: 60Sec.
 Keep Alive Fail: 1 TimesSwitch

Modem/WAN - Backup Link

Connection Type: Disabled

Optional Settings

Device Name: Industrial Cellular Router
 Host Name: [Redacted]
 Domain Name: [Redacted]
 MTU: Auto 1500

Save Apply Cancel

Click to see the IP received WAN connection.

Status > Modem/WAN

Configuration not applied

RICON Control Panel

Connecting Machine ...

- Status
- System Info
- Modem/WAN**
- LAN
- WLAN
- Router Table
- Network
- Forward
- VPN
- Security
- Monitoring
- DTU(IP Modem)
- System

Modem/WAN

Modem

Module IMEI
SIM No. SIM1
Status of SIM OK
IMSI of SIM

Signal Status -61 dbm
Network FDD LTE
Net control status Connect
Click to Connect/Disconnect **Disconnect**

Modem/WAN - Main Link- Current

Connection Type	2G/3G/4G-PPP
Connection Time	
IP Address	
Subnet Mask	
Gateway	
DNS	

Refresh

Modem/WAN - Backup Link

Connection Type	Disabled
-----------------	----------

2. NAT SETTINGS

To connect to the interter via the S9922L, proceed as follows. After selecting Wan Nat as Enable and click the **Save** icon.

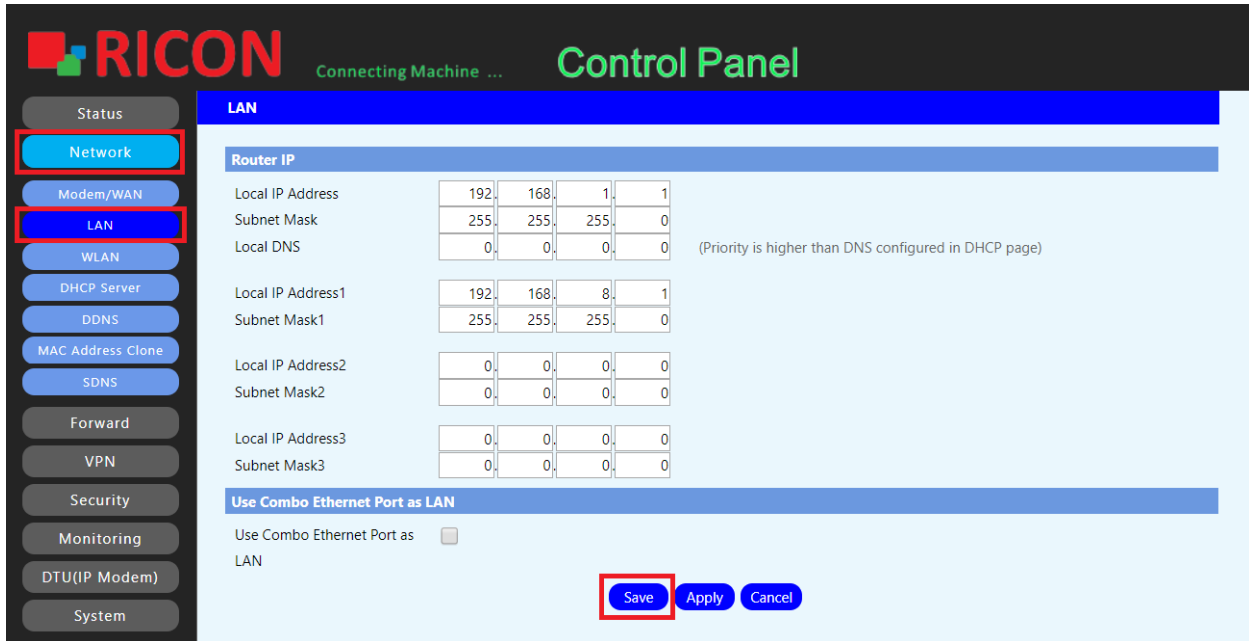
Forward > NAT



3. LAN SETTINGS

LAN settings are used to manage local area network units which are connected to a S9922L Router, make them reach to the desired network or internet regarding the network topology. Follow the steps below to change the existing LAN IP block or add another IP block. Enter the IP block you have specified and click **Save**.

Network > LAN



RICON Connecting Machine ... **Control Panel**

Status

Network

Modem/WAN

LAN

WLAN

DHCP Server

DDNS

MAC Address Clone

SDNS

Forward

VPN

Security

Monitoring

DTU(IP Modem)

System

LAN

Router IP

Local IP Address

192	168	1	1
-----	-----	---	---

Subnet Mask

255	255	255	0
-----	-----	-----	---

Local DNS

0	0	0	0
---	---	---	---

 (Priority is higher than DNS configured in DHCP page)

Local IP Address1

192	168	8	1
-----	-----	---	---

Subnet Mask1

255	255	255	0
-----	-----	-----	---

Local IP Address2

0	0	0	0
---	---	---	---

Subnet Mask2

0	0	0	0
---	---	---	---

Local IP Address3

0	0	0	0
---	---	---	---

Subnet Mask3

0	0	0	0
---	---	---	---

Use Combo Ethernet Port as LAN

Use Combo Ethernet Port as LAN

Save **Apply** **Cancel**

DHCP is on in the default configuration. You can follow the steps below to configure the DHCP settings.

Network > DHCP Server

RICON
Connecting Machine ...
Control Panel

DHCP Server

Status

Network

Modem/WAN

LAN

WLAN

DHCP Server

DDNS

MAC Address Clone

SDNS

Forward

VPN

Security

Monitoring

DTU(IP Modem)

System

Network Address Server Settings (DHCP)

DHCP Type: DHCP Server

DHCP Server: Enable Disable

Start IP Address: 192.168.1. 100

Maximum DHCP Users: 50

Client Lease Time: 1440 minutes

Static DNS 1: 0. 0. 0. 0 (Priority is higher than DNS obtained form WAN)

Static DNS 2: 0. 0. 0. 0

Static DNS 3: 0. 0. 0. 0

WINS: 0. 0. 0. 0

Advanced

No DNS Rebind: Enable Disable

Additional DNSMasq Options:

Statically Assigned

Static Address Setting

Max rule number:16

Number	Name	MAC Address	Host Name	IP Address	Client Lease Time
None					

Select All Delete

Name:

MAC Address: (xxxxxxxxxxxx)

Host Name: (optional)

IP Address:

Client Lease Time: minutes (0: Disabled)

Save
Apply
Cancel