

User Manual of Access Controller





Thank you for purchasing NC-Link Access Controller. This manual will instruct you how to configure and manage the APs with this controller, enable you to use it in a perfect status.

Please check the Package before use it.

Package Contents

Item	Description	Unit	QTY
1	Access Controller	PCS	1
2	Power Cord	PCS	1
3	Mounting Accessory(H91G)	Set	1
4	Quick Installation Guide	PC	1

1. Manual Instruction

This manual is subject to tell users how to use this Wireless Access Controller properly. Contents include description of this platform's properties, and how to configure this platform. Pre-reading this manual before operation is highly recommended.

1.1 Target Reader

This manual is for those familiar with basic networking knowledge and terminology

1.2 Conventions

If without extra explanation, this device, or WIFI management platform mentioned on this guide stands for AC Controller Wifi management platform, short for AC Controller

2. Product Introduction

Access Controller is a highly performance Wi-Fi management platform, especially for Wi-Fi in hotel or Small & Medium Enterprise.

It's capable for managing all NC-Link Access point, features with AP auto-detection, AP status preview, AP configuration, MAC filtering, AP software upgrade simultaneously, AP group ect. Match up with NC-Link Access Point to provide high performance & reliable solution.

2.1 Product Layout 2.1.1 Front Panel





LED Indicator

LED	Name	Indication
		Power is ON, means status is up
Power	Power Light	Power is OFF, mean status is down
		Flashing, means system status is
Dura	Custom Linkt	normal
Run	System Light	OFF or Solid, means status is abnormal

Reset Button

If need to restore the Access Controller into factory default, please do following procedure: Power on AC Controller, use a pin to press and hold the reset button until all LED becomes quick-flash.

Then release the button and wait for AC Controller to reset to factory default setting. After reset, the default IP address of Access Controller is **192.168.10.1**, default user name and password are **admin**.

RJ45 Connector

 $5 \times 10/100M/1000Mbps$ auto-negotiation RJ45 Ethernet Port **Notice**:

LAN/WAN port is LAN port only on the default mode, only when WAN setting is enabled then LAN/WAN port will change to WAN port.

2.1.2 Rear Panel



DC Connector

DC Connector located on the right side of Access Controller's rear panel, input power is AC 100-240V \sim 50/60Hz 0.3A

Grounding For Lightening

Please deploy ground connection to avoid lightening stroke, detail installation please refer to "Grounding For Lightening Guide".

3. Login

Please make sure the following items before login the Access Controller.



- Access Controller has normal powered on, LAN port has been connected with the management host
- The management host has been properly installed IE 7.0 or higher browser version
- IP Address is dynamic

Login Steps:

Open IE browser, input **http://192.168.10.1** in the address bar to login AC Controller's Web management interface.

http:// 192.168.10.1	~

Access Controller login screen require user name and password, the default is admin, input and click "**OK**"

Windows Security	×
iexplore.exe	
The server 192.168.10.1 is askir password. The server reports th Point.	ng for your user name and nat it is from Wireless Access
Warning: Your user name and p basic authentication on a conn	password will be sent using ection that isn't secure.
admin	
•••••	
ОК	Cancel

After login, you can see below Web page

NC-	-LINK	<	WL	AN Acces	s Controlle	er						简体中文 English
Memory Usage:	•	III De	vice List				Search by I	P	~		٩	Function 😔
	2%	□ Select	SN Location Na	ime Device IP	Device MAC	Users	Version	Channel	Online Time	Group	Config	Batch Set
CPU Usage:	• %											Refresh
СРИ	: Dual 880MHz											Delete
Device List	CK Zero Config											Clear all devices
												Reboot
Device Group	Device Log											upgrade
Q Address Server	Gateway											
		Connect	ed AP 0/50	Online AP 0	Offline AP 0	Users 0	All AP	•				





4. Function Setting 4.1 Device List

NC-	-LİNK	5	N	LAN AC	cess Co	ntroller							IBG8中文 Eng
Memory Usage:	۲	III De	evice List				5	earch by IP		×		4	Function 📀
	2%	Select	SN Location	Name	Device IP	Device MAC	Users	Version	Channel	Online Time	Group	Config	Databa Cat
Mer	nory:2048M		1 2	AP221	192.168.188.2	1000000000	68 0	V1.5	7	0:29:06	N/A		Battin Set
CPU Usage:	•		2 3	AP224P	<u>192 168 188 3</u>	Contrabution	11 0	V1.1	7	0:24:54	N/A		Refresh
00	0/		3 4	AC44AP	192 168 188.4	1.01.00.00	-C 0	V1.4	7	0:22:16	N/A		
	Dual B80MHz												Delete
Device List	OK Zero Config												Clear all devices
													Reboot
Device Group	Device Log												Reset
													upgrade
9	12												
Address Server	Gateway												
		Connec	ted AP 0/50	Online AF	0 Offine	AP 0 Us	0 21	All AP	•				

Menu in the right side.

Batch Set: Setting Access Points with same parameters in one time
Refresh: Refresh the status of the Access Point
Delete: Delete the Access Point shown in the list
Clear all devices: Clear all devices shown in the list
Reboot: Reboot the Access Point you select
Reset: Reset the Access Point you select
Upgrade: Upgrade the Access Point you select

Notice:

All the functions in the right menu, you have to select at least one device.

NC-LINK WLAN Access Controller													
	۲	III De	evice List					learch by IP		×		Q.	Function 🛛
1	2%	Select	SN Locat	tion Name	Device IP	Device MAC	Users	Version	Channel	Online Time	Group	Config	
Ma	mory 2048M	0 9	1 2	AP221	192 168 188 2	1.00000000	0 83	V1.5	7	0.29.06	N/A	1	Batch Set
CPU Usage:		0 9	2 3	AP224P	192 168 188 3	20100000	0 11	V1.1	7	0:24:54	N/A		Defrach
0	0/		3 4	AC44AP	192 168 188.4	e	~ 0	V1.4	7	0:22:16	N/A		Neitesii
	2: Dual BEOMH2												Delete
Device List	OK [®] Zero Config												Clear all devices
													Reboot
Device Group	Device Log												Reset
-													upgrade
Address Server	Centremary												
		Concert	ted AP	Online Al	0 Office	A2 01 1100		All AP					



The Access Points display in the list, you can also set particular one through click

edit \blacksquare of the device.

Wlan Device Con	fig		\times
Device Status	Device Model	NC-AC44APP	
	Online Time	0:06:22	
Device Netwo	rk Device MAC		
	Device IP	192.168.200.24	
Wireless Basi	c Software Name	NC-AC44APP-AP-V2.0-B20160630124730	
	Version	V2.0	
Wireless Advance	AC IP	192.168.200.1	
	SSID	NC-Link_Office/NC-Link_Office_5G	
	BSSID		
Amelia	Channel	11/60	
Арріу	Wireless Security	WPA/WPA2-PSK-TKIP/WPA/WPA2-PSK-TKIP	
	RF Output Power	100%/100%	
Close	Beacon Interval	100/100	
	Coverage Threshold	-90/-90	
	Device Auto optimization	Disabled	

Device Status



Device Network



NC–LINK Beyond Itself	(
Wlan Device Config				
Davies Status	Device List	Wlan Device 1 🔻		
Device status	Main AP Configur	ation[.	d	
Device Network	Status	Enable 🔻	Broadcast SSID	Enable 🔻
Device Network	SSID	NC-Link_Office	Vlanld	0 (0-4094)
Mirolago Dogio	Wireless Security	WPA/WPA2-PSK-TKIP		Config
Wireless Basic	Virtual AP Config	uration1[00:00:00:00:00:	00]	
Wirologe Advanced	Status	Disable 🔻	Broadcast SSID	Enable 🔻
Wireless Auvanceu	SSID	WLAN1	Vlanid	0 (0-4094)
	Wireless Security	Open System		Config
	Virtual AP Config	uration2[00:00:00:00:00:	00]	
	Status	Disable 🔻	Broadcast SSID	Enable 🔻
Apply	SSID	WLAN2	Vlanid	0 (0-4094)
	Wireless Security	Open System		Config
Close	Virtual AP Config	uration3[00:00:00:00:00:00:	00]	
o lost	Status	Disable 🔻	Broadcast SSID	Enable 🔻
	SSID	WLAN3	Vlanid	0 (0-4094)
	Wireless Security	Open System		Config

Wireless Basic



Wireless Advanced

4.2 Zero Config

Zero Config is a configuration assigned by controller when the Access



Point is detected with default setting. Like Access Point is first connect to controller or the Access Point after reset to default setting.

NC	-LINK	. WLAI	N Access Controller					Eng
Memory Usage:	•	Zero Config					Function 🛛 📀	
1 Me	2%	SSID	Wireless Security	RF Output Power	Timing Reboot	Config	New	
CPU Usage:	•)%): Dual 880MHz						Delete	
Device List	CK Zero Config							
Device Group	Device Log							
Address Server	Gateway							

Click "New" to set the Zero Config



Set the Group Name of the Zero Config, and also you can set the detail time to make it reboot to optimize the devices status.

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NC-LİNK	WLAN Ad	cess Controller				文 English
mory Usage: 🌔 📑	Zero Config				Function	⊘
12% Memory:2048M	ssiD New	Wireless Security Device List Wan De	RF Output Power	Timing Reboot	Config	
U Usage:	Wireless Basic Wireless Advanced Wian Group Name	Main AP Configuration Status Enable SSID WLAN0 Wireless Security Open Syst	• Broadcast SSID Vianid em	Denable V 0 (0-4094) Config.	Delete	
Device List Zero Config	ZeroCfgGROUP_NAME1 When device running at 3:00 Automatic reboot	Config Authentication OPE Key Length WEP Key Formate ASC Encryption TKIP	N V 64 Bit V	(0-4094)		
vice Group Device Log	Apply	Key Remark None		Apply		
	Close	SSID WLAN3	Vianid	0 (0-4094)		

The first part is the Wireless Basic.

Device List: Wlan Device 1 is for 2.4GHz; Wlan Device 2 is for 5.8GHz **Status**: Enable or Disable the wireless signal

Broadcast SSID: Enable or Disable broadcast SSID

SSID: Set the SSID

VlanId: Set the VLAN ID if needed

Wireless Security default is Open. Click the "**Config**" to set the encryption you need.

Memory Usage:	•	Zero Config						Function	<u>~</u>
	2%	SSID	Wireless Security	RF Output Po	ower	Timing Reboot	Config	New	
CPU Usage:	*)%): Dual 880MHz	Wireless Basic Wireless Advanced Wian Group Name	Device List Channel Client Isolation Fragment Threshold	Wian Device 1 ▼ Auto Select ▼ Disable ▼ 2346	(256-2346)			Delete	
Device List	OK Zero Config	ZeroCfgGROUP_NAME1 When device running at 3:00 • Automatic reboot	RTS Threshold Beacon Interval Aggregation	2347 100 Enable V	(1-2347) (50-1024)ms				
Device Group	Device Log	Apply Close	ShortGi Rev Option RF Output Power Coverage Threshold	Enable V 5 V 100% V	(-65dBm95dBm)				
Address Server	Gateway								
System uptime	e 0Day 3:52:17	Softv	vare Version NC-H90)G-V4.1-B201606290	93622				

The second part is the Wireless Advanced.





Device List: Wlan Device 1 is for 2.4GHz; Wlan Device 2 is for 5.8GHz **Client Isolation**: Enable or Disable client isolation

RF Output Power: To set the RF Output Power of the device, it divided into 100%, 75%, 50%, 25%, 12.5%

Coverage Threshold: To limit the RSSI of the access device

Note: Other advanced setting is for more professional or maintenance person, suggest to keep them as default.

Wlan Device 2 is also the same way for setting if it needs 5.8GHz. After all the parameter finished, click "**Apply**" and you will see the Zero Config is generated and show as below:

Memory Usage:	•	Zero Config					Function 🛛 📀
()1	2%	SSID	Wireless Security	RF Output Power	Timing Reboot	Config	
Men	mory:2048M	NC-Link_Office/NC-Link_Office_5G	WPA/WPA2-PSK-TKIP/WPA	100%/100%	Disabled		Delete
CPU Usage:	۲						
()	%						
СРИ	: Dual 880MHz						
	ок						
Device List							
Device Group	Device Log						
9	10						
Address Server	Gateway						
ystem uptime	e 0Day 4:3:3		software Version NC-H90G-V	4.1-B20160629093622			

4.3 Device Group

With device group, you can change the group devices information together, such as SSID and password. Click New to set a new group.



VC											
evon	ditsolf										
cycri	u nocij										
		///////									
									hunner		
mon: Usono:	4	- Device	C								
mory osage.		Device	Group							Function	
1	2%	Select SN	WI	an Group Name		Co	ntains AP		Config		
Me	mory:2048M									New	
			New								
J Usage:	۲		Wireless Basic	Device List	Wan Device 1 🔻					Delete	
	0/			Main AP Configur	ation						
) (1%		Wireless Advanced	Status	Enable V	Broadcast SSID	Enable v	(0.4004)			
СРІ	J: Dual 880MHz			Wireless Security	Open System	vianu	Config	(0~4054)			
			Wian Group Name	Virtual AP Config	uration1		oomig				
	OK+		GROUP_NAME1	Status	Disable 🔻	Broadcast SSID	Enable 🔻				
	7				WLAN1	Vianid	0	(0-4094)			
Vevice List	Zero Coning			Wireless Security	Open System		Config				
				Virtual AP Config	uration2		Frankla a	7			
				Salus	UISABle V	Vianid	Enable +	(0-4094)			
				Wireless Security	Open System	- Turnu	Config				
vice Group	Device Log		Apply	Virtual AP Config	uration3						
				Status	Disable 🔻		Enable 🔻				
			Close	SSID	WLAN3	Vlanld	0	(0-4094)			
8	2			Wireless Security	Open System		Config				
dress Server	Gateway										

Set the Group Name as you need

New					\times
Wiroloss Basic	Device List	Wlan Device 1 🔻			
Wileless Dasic	Main AP Configur	ation			
Wireless Advanced	Status	Enable 🔻	Broadcast SSID	Enable 🔻	
Wilciess Auvaliceu	SSID	WLAN0	Vlanld	0 (0-4094)	
	Wireless Security	Open System		Config	
Wlan Group Name	Virtual AP Config	uration1			
GROUP_NAME1	Status	Disable 🔻	Broadcast SSID	Enable 🔻	
	SSID	WLAN1	Vlanld	0 (0-4094)	
	Wireless Security	Open System		Config	
	Virtual AP Config	uration2			
	Status	Disable 🔻	Broadcast SSID	Enable 🔻	
	SSID	WLAN2	Vlanid	0 (0-4094)	
	Wireless Security	Open System		Config	
Apply	Virtual AP Config	uration3			
	Status	Disable 🔻	Broadcast SSID	Enable 🔻	
Close	SSID	WLAN3	Vlanid	0 (0-4094)	
	Wireless Security	Open System		Config	

Wireless Basic setting same as Zero Config





Wireless Advanced setting same as Zero Config

Memory Usage:	٣	E De	vice Grou	ıp								Function 📀
1	2%	Sclect	SN		v	Wlan Group Name				Contains AP	Con	fig
Men	J /0 nory:2048M		1			NC-Link Group 1			🚔 lhe gi	roup consists of AP [0]	New
			14/1 C	D.							$\mathbf{\mathbf{\vee}}$	
CPU Usage:	<u> </u>		Select	SN	Location	Name	Device IP	Device MA	C Online Ti	ime Group		Delete
	0/		201001			Add a device t	to the wireles	s group				
CPU	Dual 880MHz					Select SN	Location	Name	Device IP	Device MAC	G	
						✓ 1			192.168.200.24			
	ок											
Device List	Zero Config											
Device Group	Device Log											
0												
24			Add AP	Remove	AP	Add AP						
Address Server	Gateway											
System uptime	0Day 6:21:20				Soft	tware Version N	IC-H90G-V4.	1-B201606	29093622			
		rininin prote	to to the post	hining		*****	ti di pintente de					

Click $\stackrel{\bullet}{=}$ to add Access Point to the Group. Select the AP and click **Add AP**. After finished you can see the AP quantity will change in **Contains AP**.



And also you can see in the **Device List**.

NC	-LİNK		WLAN	Access	Controller								
Memory Usage:	۲	III Devi	ce List				Search by IF	2	~		٩	Function 🛛 📀	
1 Me	2%	□Select	SN Location Name	Device IP	Device MAC	Users 0	Version V2.0	Channel 11/60	Online Time 2:03:16	Group NC-Link Group	Config	Batch Set	
CPU Usage:	•									1	J	Refresh	
Сри	J: Dual 880MHz											Delete	
		_										Clear all devices	
Device List												Reboot	
Device Group	Device Log											Reset	
0												upgrade	
Address Server	Gateway												
		Connected	AP 1/50 On	line AP 1 C	offline AP	lisers 0	AILAP						

4.4 Device Log

Device Log show AP's record, such as on line record, offline record, device configuration record in the display area. And you can clear the record when it is necessary.



NC-LINK	WLAN Access Controller	简体中文 Englis
13% J Usege: 0% CPU: Dual 880/MHz Device List Error Config Device Group	1970/01/01 04:23:00 Devict02.188.200.24 Mac[Journal set in a strain is in power change 1970/01/01 04:23:00 Devict02.188.200.24 Mac[Journal set in a strain is in power change 1970/01/01 04:23:10 Devict02.188.200.24 Mac[Journal set in a strain is in power change 1970/01/01 04:23:10 Devict02.188.200.24 Mac[Journal set in a strain is in power change 1970/01/01 04:23:10 Devict02.188.200.24 Mac[Journal set in a strain is in power change 1970/01/01 04:42:20 Devict02.188.200.24 Mac[Journal set in a strain is in power change 1970/01/01 04:42:20 Devict02.188.200.24 Mac[Journal set in a strain is in power change 1970/01/01 04:42:28 Devict02.188.200.24 Mac[Journal set in a strain in power change 1970/01/01 04:42:28 Devict02.188.200.24 Mac[Journal set in a strain in power change 1970/01/01 04:42:24 Devict02.188.200.24 Mac[Journal set in a strain in power change 1970/01/01 04:42:24 Devict02.188.200.24 Mac[Journal set in a strain in a strain in a strain in a strain in a strain in a strain in a strain in a strain in a strain in a strain in a strain in a strain in a strain in a strain in a s	Clear

4.5 **Address Server**

Through Address Server, to set server IP address, subnet mask; Server address Pool, main to assign IP address to the connected wireless AP, no need to specify the IP address for wireless AP manually.

Memory Usage:	G	Address Server				Function 📀
	2%	AP Address Server	Server IP Address 192	168 200 1		Refresh
CPU Usage:	€ D: Dual 880MHz		Server Address Count 200 Effective Time(s) 86400 Allocated AP number 2	(1-300) Range:(300-864000)s		Apply
		AP address information	list			
		AP Device Name	IP Address	MAC Address	Lease Time	
Device List	Zero Config	NC-AC44APP NC-AP233P	192.168.200.24 192.168.200.94		0 D 232605 0 D 1455:16	
Address Server	Gateway					
System uptime	e 0Day 4:57:31		Software Version NC-H90G-V4	i.1-B20160629093622		

4.6 Gateway 4.6.1 Status **Basic Information**

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You can find Software, Hardware version of the device in Basic Information.

NC-LİNK	WLAN Access Controller	简体中文 English
🔶 AP Management	an an an an an an an an an an an an an a	Function 🛛 😔
Help	LAN Configuration	Basic Info
Z Status	DHCP Status Enable DHCP Client 192.168.10.1-192.168.10.101	LAN
Detwork Firewall	Subnet Mask 255.255.252.0 MAC Assigned IP Number 1	WAN
O Management	Assigned IP DHCP Client	

LAN Status



NC-LINK	WLAN Access Controller	简体中文 English
<table-cell-rows> AP Management</table-cell-rows>	wan	Function 🛛 📀
Help	WAN Configuration WAN Status WAN port is disconnected	Basic Info
Status	Connect Type DHCP WAN IP	LAN
Detwork Firewall	Subnet Mask Deafult Gateway DNS 0.0.0.0	WAN
© anagement		

WAN Status

4.6.2 Network LAN Setting

Help LAN IP Setting LAN S IP Address 192 168 10 1 Subnet Mask 255 255 252 0 WAN DHCP Server Setting DHCP Server @ Enable Disable Cloud	ttings
Status Subnet Mask 255 255 252 0 WAN	
DHCP Server Enable Disable Cloud	ettings
U DHCP IP Count 192 168 10 1 192 168 10 101 Network Firewall DHCP I asso Time 75 400 Pange/200 864000)r 101	ettings
Auther Apply Static Bind IP-MAC List Delete Local IP-MAC List Add Refresh Loca	Auth
Management	

In the network LAN Setting, you can configure the LAN IP Address and DHCP Server Information. Default LAN IP is 192.168.10.1; DHCP Server is enable as default. And





you can also binding the IP address with the MAC address.

NC-LİNK	WLAN Access Controller	简体中文 English
🔶 AP Management	WAN Settings	Function 📀
Help	WAN Setting WAN Setting Dynamic IP Dynamic IP Dynamic IP PPPOE(ADSL)	- LAN Settings
Status	Statuto Ir Disable Primary DNS 8 8 8 8 Secondary DNS 4 4 4 4	Cloud Settings
Network Firewall	Advanced Settings MTU 1500 (1000-1500)	Authentication
Management	MAC Clone Scan MAG Enable UPNP Enable IGM proxy Enable Ping Access on WAN Enable Ping Access on WAN Port: 8080 (Port Range 1-65535) Enable Pisc pass through on VPN connection Enable L2TP pass through on VPN connection Enable L2TP pass through on VPN connection	Local Auth
	Apply	

WAN Setting

In the WAN Setting, support Dynamic IP, PPPOE(ADSL), Static IP, PPTP access type. In the advanced setting, can enable UPnP, IGMP proxy, Ping on WAN, VPN pass through.

NC-LINK	WLAN Access Controller	简体中文 English
🔶 AP Management	WAN Settings	Function 🛇
Help	WAN Setting Upnamic IP	LAN Settings
Z Status	Dynamic IP Set DNS Manually	WAN Settings
•	Primary DNS 8 8 8 Secondary DNS 4 4 4 4	Cloud Settings
Network Firewall	Advanced Settings Apply	Authentication
🔅 Management		Local Auth

Dynamic IP

Access Type is Dynamic IP, no need to do any other setting, just click "Apply"





PPPOE(ADSL)

NC-LİNK	WLAN Access Controller	简体中文 English
🔶 AP Management	WAN Settings	Function 😔
Help	WAN Setting WAN Setting PPPOE(ADSL)	LAN Settings
Z Status	PPPOE(ADSL) Service Name If not, please do not fill out	WAN Settings
•	Server Name If not, please do not fill out User Name	Cloud Settings
Network Firewall	User Password Dail Type Normal Special Way 1 Special Way 2	Authentication
🌣 Management	Idle Time 30 Minutes will Disconnect Auto Manual	Local Auth
	Set DNS Manually	
	Primary DNS 8 8 8 Secondary DNS 4 4 4	
	Advanced Settings MTU 1452 (1000-1492)	

Access Type is PPPOE(ADSL), fill in the information provided by ISP then click "**Apply**"

Static IP

<table-cell-rows> AP Management</table-cell-rows>	WAN Settings	Function
Help	WAN Setting Static IP	LAN Setting
×	Static IP	MANI Cottin
Status	IP Address 192 168 2 1	WAIN Setun
	Subnet Mask 255 255 0	Cloud Settin
	Default Gateway 192 168 2 254	
etwork Firewall	Primary DNS 8 8 8 8	Authenticati
	Secondary DNS 4 4 4 4	
0	Advanced Settings	Local Auth
nagement	MTU 1452 (1000-1500)	
	MAC Clone Scan MAC	
	Enable UPNP Enable (GMP proxy Enable Ping Access on WAN Enable Web Server Access on WAN Port: 8080 (Port Range 1-65535)	
	Enable IPsec pass through on VPN connection Enable PPTP pass through on VPN connection Enable L2TP pass through on VPN connection	

Access Type is Static IP, fill in the information provided by ISP then click "Apply"





NC-LINK	WLAN Access Controller	简体中文 English
<table-cell-rows> AP Management</table-cell-rows>	WAN Settings	Function
Help	WAN Setting PPTP	LAN Settings
Z Status	Server IP	WAN Settings
	User Name User Password	Cloud Settings
Network Firewall	Address Type Static IP IP Address	Authentication
🗘 Management	Subnet Mask Default Gateway	Local Auth
	Advanced Settings MTU 1452 (1000-1492)	
	MAC Clone Scan MAC Enable uPNP Enable (GMP proxy Enable Fing Access on WAN Enable Web Server Access on WAN Port. 8080 (Port Range 1-65535)	

Access Type is PPTP, fill in the Server IP, Username, Password ect according to the PPTP server. Then click "**Apply**" to access.

4.6.3 Firewall IP/Port Filtering

NC	-LINK	WLAN Access Controller	简体中文 Englis
4 A	AP Management	IP/Port Filtering	Function 🛛 👁
ŀ	Help	IP/Port Filtering IP/Port Filtering Drop	IP/Port Filtering
~	Status	Lose Diop 10 - 192 168 10 - Protocol TCP+UDP • - - - 192 - 168 - 10 -	MAC Filtering
Naturati	V	Port Range - (Range 1-65535) Mark	URL Filtering
HELWOIK	Thewan	Max rule counts : 200 Add Delete Cancel App	Port Forwarding
0		IP Range Port Range Protocol Mark 192.168.10.2-192.168.10.23 8080 - 8080 TCP+UDP	DMZ Settings
Management			

Setting the IP range and Port range to Drop or Accept the data connection. Add it after finished the parameter setting, then "**Apply**". Max 200 rules.





MAC Filtering

Image: AP Management Image: MAC Filtering Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of the management Image: Bised of	NC	-LINK	WLAN Access Controller	简体中文 English
Help Status Image: Brickeling MAC Filtering Mac Giltering Mac Gil	4 🗭	AP Management	MAC Filtering	Function 🛛 🛇
Status Mac <		Help	MAC Filtering	IP/Port Filtering
Image: Max rule counts : 200 Add Delete Cancel Appy URL Filtering Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Delete Cancel Appy Image: Max rule counts : 200 Add Dele	~	Status	MAC Drop Accept Scan MAC Mark	MAC Filtering
DMZ Settings	(Network	Firewall	Max rule counts : 200 Add Delete Cancel MAC Mark fc.1a:11:8f6d.9e	Apply URL Filtering Port Forwarding
	C Management			DMZ Settings
	Management			

Select Drop or Accept the MAC Filtering. Then you can manually input the MAC or use Scan MAC to list it for you to choose. Add after finished and "**Apply**". Max 200 rules.

NC-LİNK	WLAN Access Controller	简体中文 English
<table-cell-rows> AP Management</table-cell-rows>	URL Filtering	Function
Help	URL Filtering URL Filtering Drop	IP/Port Filtering
Z Status	URL https://www.google.com Max.rule.counts:200 Add Delete Cancel Apply	MAC Filtering
		URL Filtering
		Port Forwarding
Management		DMZ Settings

URL Filtering

Select Drop URL Filtering and fill in the URL you want to block. Then ${\bf Add}$ and $``{\bf Apply}''$





Port Forwarding

NC-LİNK	WLAN Access Controller	简体中文 English
<table-cell-rows> AP Management</table-cell-rows>	Port Forwarding	Function 📀
Help	Port Forwarding Rule Type User-defined	IP/Port Filtering
Z Status	Rule Name Lan IP 192 168 10 Image: The IP of the computer connected(192.168.10.2)	MAC Filtering
	External Port - (Range 1-65535) Internal Port - (Range 1-65535)	URL Filtering
Network Firewall	Protocol TCP • Max rule counts : 200 Add Delete Cancel	Port Forwarding
Ç.	Rule Name Forward IP Protocol External Port Internal Port	DMZ Settings

Port forwarding

Port forwarding is to forward data from one port to another port, enabling external users have access to an internal private IP in LAN, from an external triggered NAT router

Rule Type

Set up rule type, which have specific port number

Rule name

Port forwarding rule name LAN IP IP of the port forwarding External port External port number of port forwarding Internal port number of port forwarding Protocol Protocol used for port forwarding

DMZ Settings



DMZ

DMZ is short for demilitarized zone. It's a compartment between security zone and non-security zone, in order to solve the problem of external network can not access into internal server after firewall installation. This DMZ zone is a small network zone between external and internal network. While in this small zone, users usually place some open server, like web server, FTP server, or forum. DMZ will protect internal network more efficiently, because this network allocation is another obstacle for hackers, compared to normal firewall.

IP LAN IP

IP address of DMZ host

4.6.4 Management System



NC-LIN	WLAN Access Controller	简体中文 English
<table-cell-rows> AP Management</table-cell-rows>	System	Function 😔
Help	Save/Reload Settings	System
	Backup Save the configuration file to your computer 通择文件 未选择任何文件 Restore Using the saved configuration file recovery configuration	DDNS
Network Firewall	Reset Default Restore the factory default settings, please press this button Reboot Reboot	Smart QoS
<u>.</u>		Logs
management		Upgrade Firmware
		System Time

Backup

Save the configuration files to your computer

Restore

Using the saved configuration file recovery configuration

Restore default

Restore the factory default settings, please press this button

Reboot

Reboot the system

DDNS

Image: Problem Image	NC-LINK	WLAN Access Controller	简体中文 English
Image: DDNS Settings System Image: DDNS Settings Image: DDNS Settings Image: DDNS Settings	🗲 AP Management		Function
Image: Status Imag	Help	DDNS Settings Dynamic DNS [Enable •]	System
Public IP Smart QOS Network Domain User type User Chick Status Logs Marangement Logs Vertice Logs Status System Time	Z Status	User Name Password/Key	DDNS
Link Status No account?Registration Forget password Help Appy Cupgrade Firmware System Time	Active of the second seco	Public IP Domain User type	Smart QoS User
System Time	C Management	Link Status No account?Registration Forget password Help Apply	Logs
			System Time

Enable the DDNS. Fill in the User Name and Password then "Apply"





Smart QoS

NC-LİNK	WLAN Access Controller	简体中文 English
🔶 AP Management	Smart QoS	Function 🛛 😔
Help	Qos Basic Settings Status Enable Oisable	System
Z Status	Upload 50000 Download 50000	DDNS
•	Apply	Smart QoS
Network Firewall	P Address Range 192 - 168 10 192 168 10 192 168 10 192 168 10 192 168 10	User
•	Mode [®] Shared ◎ Exclusive	Logs
Management	Max bandwidth(Decimal point is not allowed) Download 0 Kbps	Upgrade Firmware
	Mark (Double-click the selected items to modify the settings, QoS allows you to add up to 8 rules) Add Delete Modify Cancel	System Time
	IP Address Range MAC Address Mode Upload Download Mark	

Status

Enable or Disable QoS function

Upload

Set up total uploading bandwidth

Download

Set up total downloading bandwidth

IP Address Range

Set up IP range of bandwidth

MAC address

Set up bandwidth control by mac address, user can choose it from Scan MAC, or setup by manual.

Mode

QoS mode settings, shared mode means under the QoS rules, the main PC within all IP range can share the specified bandwidth;

Exclusive mode means single main PC can share the specified bandwidth;

Max bandwidth

Max bandwidth under QoS rule



User

NC-LINK	WLAN Access Controller	简体中文 English
🔶 AP Management	User	Function 🛛 😔
Help	User Settings	System
<mark>∼</mark> Status	Password ·····	DDNS
• •	Apply	Smart QoS
Network Firewall		User
Ö Management		Logs
		Upgrade Firmware
		System Time

User Name

Reset new log-in user name

Password

Reset new log-in password

Confirm Password

Comparison to new password, to confirm user input password correctly in two times

Logs

NC-LİNK	WLAN Access Controller	简体中文 English
🔶 AP Management	Logs	Function 🛛 📀
Help	System Logs Status Enable Disable	System
Z Status	Remote Log Service	DDNS
	System Log View	Smart QoS
Network Firewall		User
Anagement		Logs
		Upgrade Firmware
	Refresh Clear	System Time

Status





Enable or Disable to show system log

Remote Log Service

To decide whether send System log into some pointed remote server synchronously

Upgrade Firmware

NC-LINK WLAN Access Controller		
<table-cell-rows> AP Management</table-cell-rows>	Upgrade Firmware	Function 📀
Help	Upgrade Firmware Software Version NC-H90G-V4.1-820160629093622	System
Z Status	For software upgrade 1. Click on IBrowse] and select the software to be upgraded 2. Click (upgraded button 这程文件 计数据分析	DDNS
Detwork Firewall	Note Upgrade software may cause the system to interrupt In the process of updating the firmware, do not power down, or it may damage the system!	Smart QoS User
C Management	Upgrade	Logs
		Upgrade Firmware System Time

This feature allows the device firmware upgrade.

Noted: Upgrading software may cause system outage, In the process of upgrading the firmware, do not power off, otherwise it may damage the Access Controller!

System Time

NC-LINK	WLAN Access Controller	简体中文 English
🗲 AP Management	System Time	Function 🛛 📀
Help	System Time System Time 1970-01-01 0556.03 Synchronization with the host	System
	Status 💽 Enable 🔍 Disable NTP Server time.nist.gov 🔹	DDNS
•	Custom NTP server	Smart QoS
Network Firewall	When device running at 0.00 * Automatic reboot Apply	User
Management		Logs
		Upgrade Firmware
		System Time

Synchronization with the host





Synchronization time with connected PC and router **Status** Enable or Disable NTP **NTP Server** Select the server time synchronization **Custom NTP Server** Setting user-defined synchronization server IP address **Time Zone** Setting the router's time zone

5. Trouble Shooting

Q1: Controller can't found APs when AP connect with controller An: The controller automatically discovers APs, APs will be detected and shown on the list within one minute. And make sure the AP and controller are in the same subnet.

Q2: Which APs can apply the Zero Config? An: Except the APs in "Device Group", other AP will apply Zero Config once detected by controller.

Q3: Current APs configuration don't change after change the Zero Config setting An: If you change the Zero Config and hope the APs change accordingly, you can realize in two ways. First, delete the APs on the list, and they will change the setting accordingly once detected. Second, power OFF the APs and power ON again.