

WLPS1(E)-A MH210 Setup Guide

NEC Corporation

Purpose of the Manual

This manual describes setting procedures necessary to use the Wireless LAN voice terminal MH210. Read this manual carefully and understand its content to handle the product properly.

Manual Configuration

Section 1: Overview of MH210 This section describes the appearance of MH210 and names and functions of each part.

Section 2: Start-up Procedure for MH210 This section describes how to start up MH210.

Section 3: Configuration for MH210 This section describes the configuration for MH210.

Section 4: Firmware Download Procedure for MH210 This section describes how to download firmware to MH210.

Section 5: List of Configuration Menu This section lists configuration menu in the system setting mode.

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1. Overview of MH210

Appearance of MH210 and functions of each part

THE BASICS DISPLAYS AND KEYS

LED Ring Indicator Red light indicates incoming call	NEC	 Softkey 1 Press to select the softkey menu (left). Softkey 2 Press to select the softkey menu (right).
LCD		- Scroll key Press to activate numerous telephone functions.
Offhook Press to originate/answer a call.	1 2x: 3.: 4x: 5.: 6x: 7x: 8x: 9x: * 0 #	 Headset jack END/PWR (End/Power On/Off Key) Push once to end a call. Press for more than three seconds to turn power on and off.
HOLD Press to place a call on hold.		 FNC/LOCK Press to confirm the settings. Press to control Keylock On/Off.
		TRF/SHIFT Press to transfer a call. Press to switch small/capital letter.
		Microphone

2. Start-up Procedure for MH210

Procedure for MH210 until starting operation



3. Configuration for MH210

The following two methods are available for the configuration of MH210.

- (1) Settings from MH210
- (2) Settings from Web browser

3.1 Settings from MH210

By starting MH210 in the system setting mode, the configuration data can be registered, displayed, and modified.

Procedure for starting MH210 in the system setting mode

- (1) "Power off" state
- (2) Simultaneously press [4]+[9]+[違] to power on MH210. "System Setting" displays.
- (3) Press [FNC]. Menu items display.

寬	渧橳	A 淏 寘	
[1]1	nformat	ion	
[2]N	let setti	ng	
[3]5	SIP setti	ng	
Ba	ick	Select	

* MH210 remains in the system setting mode until power-off.

Items that can be selected from the system setting menu are as follows:

- [1] Information -- Verification of settings
- [2] Net setting -- Registration and modification of network parameters
- [3] SIP setting -- Registration and modification of SIP parameters
- [4] WLAN setting -- Registration and modification of WLAN parameters

* Be sure to perform [2] to [4] at the initial start-up of MH210.

3.1.1 Factory reset

Procedures for resetting all configuration parameters to the state at shipment from the factory are as follow.

Be sure to perform them at the initial start-up of MH210.

Factory reset procedure

- (1) "Power off" state
- (2) Simultaneously press [4]+[9]+[郞]+[違] to power on MH210.
 "Load Default IP" followed by "System Setting" displays.

Now, all configuration parameters are returned to the state at the shipment from the factory.

Initial Values of Configuration Parameters at Shipment from Factory

	Parameter	Default Value
Network mode		Fixed IP
IP address		192.168.0.2
Subnet mask		255.255.255.0
Gateway		192.168.0.1
Server	DNS IP	192.168.0.3
	Port	5061
	Expire time	360
Proxy	Proxy IP	192.168.0.255
	Proxy port	5061
User account	Phone number	3
	User name	NEC
	User password	1111
Network mode		Public
ESSID		NEC
Channel		Auto
Rate		Auto
WEP select		None

* MH210 remains in the system setting mode until power-off.

After System setting mode, Press [\pounds]/[\ddagger] or [2] \Rightarrow to select Net setting.Net setting [1]Network mode [2]IP address [3]Subnet mask. Back Select [3]Subnet mask. Back Select [3]Subnet mask. Back Select [1]DHCP [2]Fixed IP Back Select [2]Fixed IP Back Select3.1.2.1 Network mode Press [\pounds]/[\ddagger] or press [1],[2] \Rightarrow Select the Network mode of handset. If select Fixed IP, refer to 3.1.2.2.Net setting [1]DHCP Back Select [2]Fixed IP Back Select3.1.2.2 IP addressInput the IP address of handset.Net setting [1]P: 192.168.0.2] Clear CPress Ok [\hbar] \Rightarrow to confirm the setting.Net setting [I]P: 192.168.0.2] Clear C	
3.1.2.1 Network mode Press [集]/[暠] or press [1],[2] Net setting \Rightarrow Select the Network mode of handset. If select Fixed IP, refer to 3.1.2.2. Net setting I]DHCP [2]Fixed IP Back Select Back Select IP Back Select Press Select [鄧] ⇒ to confirm the setting. Net setting [1]DITSSaved [2]Fi O.K. Back Select 3.1.2.2 IP address Input the IP address of handset. Net setting IP: IP2.168.0.2] Clear Clear C Press Ok [鄕] ⇒ to confirm the setting. Net setting	ect
Press Select [鄧] ⇒ to confirm the setting.Net setting3.1.2.2 IP addressInput the IP address of handset.Net settingIP: 192.168.0.2 ClearPress Ok [鄕] ⇒ to confirm the setting.Net setting	ect
3.1.2.2 IP address Input the IP address of handset. Net setting IP: 192.168.0.2 	ect
Press Ok [鄕] ⇔ to confirm the setting. Net setting)k
192. Saved 192. O.K. Clear C)k
3.1.2.3 Subnet mask Input the Subnet mask of handset. Net setting Subnet mask: 255.255.255.0 	 Dk
or Press [SHIFT] ⇒input the Subnet mask of handset. Subnet mask: www. Clear C)k
Press Ok [鄧] ⇒ to confirm the setting. Subr Saved 255. O.K.	

3.1.2.4	Gateway	Input the Gateway of handset.	Net setting Gateway: 192.168.0.1 Clear Ok
		or Press [SHIFT] ⇒input the Gateway of handset.	Net setting Gateway: www.
		Press Ok [鄧] ⇔to confirm the setting.	Clear Ok Net setting Gate 192. O.K. Clear Ok
3.1.3	SIP setting	After System setting mode,	
		Press [集]/[暠] or [3]⇔ to select SIP setting	SIP setting [1]Server [2]Proxy [3]User account Back Select
		 [1] Server—setup server value "DNS IP"/ "Po [2] Proxy—setup SIP server setting, Proxy val [3] User account—setup User account "Phone "User password" 	rt" / "Expire time" ue "Proxy IP"/ "Proxy port" number"/ "User name" /
3.1.3.1 ♦DNS s	Server setting	Press [榘]/[暠] Or press [1]⇔to set DNS IP number Press Select [鄧] ⇔to confirm the select	SIP setting [1]DNS IP [2]Port [3]Expire time Back Select
		Press [0]~[9] ⇒ to input the DNS IP number. Ex. 192.168.0.3 Press Clear[鄕] ⇔ to modify the number.	SIP setting DNS IP: 192.168.0.3
		or Press [SHIFT] ⇒input the DNS IP of handset.	SIP setting DNS IP: www. Clear Ok

	Press Ok [鄧] ⇔ to confirm the setting.	SIP setting DNS 192. Saved 0.K. Clear Ok
	Then the LCD shows.	SIP setting [1]DNS IP [2]Net setting [3]SIP setting Back Select
◆ Port	Press [榘]/[暠] Or press [2]⇔to set Port number Press Select [鄧] ⇔to confirm the select	SIP setting [2]Port [3]Expire time [1]DNS IP Back Select
	Press [0]~[9] ⇔ to input the Port number. Ex. 5061 Press Clear[鄕] ⇔ to modify the number.	SIP setting Port: 5061 Clear Ok
	Press Ok [鄧] ⇔ to confirm the setting.	SIP setting Port: 5061 Saved 0.K. Clear Ok
◆Expire time	Press [榘]/[暠] Or press [3]⇔to set Expire time Press Select [鄧] ⇔to confirm the select	SIP setting [3]Expire time [1]DNS IP [2]Port Back Select
	Press [0]~[9] ⇔ to input the Expire time. Ex. 360 Press Clear[鄕] ⇔ to modify the number.	SIP setting Expire time: 360 Clear Ok
	Press Ok [鄧] ⇔ to confirm the setting.	SIP setting Expire time 360

Clear

. _ _

Ok

3.1.3.2 Proxy	Press [集]/[暠] Or press [2]⇔ to choose "Proxy" mode.	SIP setting [2]Proxy [3]User account [1]Server Back Select
	Press Select [鄧] ⇔to confirm the setting.	
◆Proxy IP	Press [集]/[暠] Or press [1]⇔to set Proxy IP number Press Select [鄧] ⇔to confirm the select	SIP setting [1]Proxy IP [2]Proxy port
		Back Select
	Press [0]~[9] ⇔ to input the Proxy IP number. Ex. 192.168.0.255 Press Clear[鄕] ⇔ to modify the number.	SIP setting Proxy IP: 192.168.0.255
		 Clear Ok
	or Press [SHIFT] thinput the Provy ID of	1
	handset.	SIP setting Proxy IP: www.
		 Clear Ok
	Press Ok [鄧] ⇔ to confirm the setting.	SIP setting Proxy 192. O.K.
		Clear OK
	Then the LCD shows.	SIP setting [1]Proxy IP [2]Proxy port
		Back Select
◆Proxy port	Press [榘]/[暠] Or press [2]⇨to set Proxy port number Press Select [鄧] ⇨to confirm the select	SIP setting [2]Proxy port [1]Proxy IP
		Back Select
	Press [0]~[9] ⇔ to input the Proxy port number. Press Clear[鄕] ⇔ to modify the number.	SIP setting Proxy port: 5061
		Clear Ok

	Press Ok [鄧] ⇔ to confirm the setting.	SIP setting Prox Saved 5061 O.K.
3.1.3.3 User account	Press [榘]/[暠] Or press [3]⇔ to choose "User account" mode.	SIP setting [3]User account [1]Server [2]Proxy Back Select
◆Phone number setting	Press Select [鄧] ⇔to confirm the setting. Press [集]/[暠] Or press [1]⇔to set Phone number Press Select [鄧] ⇔to confirm the select	SIP setting [1]Phone number [2]Username [3]User password Back Select
	Press [0]~[9] ⇔ to input the Phone number. Ex. 2341 Press Clear[鄕] ⇔ to modify the number.	SIP setting Phone number: 2341
	Press Ok [鄧] ⇔ to confirm the setting.	SIP setting Phone 2341
	Then the LCD shows.	SIP setting [1]Phone number [2]Username [3]User password Back Select
◆User name setting	Press [榘]/[暠] Or press [2]⇔to set Username Press Select [鄧] ⇔to confirm the select	SIP setting [2]Username [3]User password [1]Phone number Back Select
	Input user name. Ex. bnet Press Clear[鄕] ⇔ to modify the number.	渧 A 溴 User name: bnet

Press [SHIFT] to change the lower case or upper case mode or numeral mode during editing.



3.1.4 WLAN setting

After System setting mode,

Press [榘]/[暠] or [4]⇔ to select WLAN setting

WLAN s	setting
[1]Network	mode
[2]ESSID	
[3]Channel	
Back	Select

Back

Press [集]/[暠] Or [1], [2], [3], [4] ⇒ to select[1]Network mode/ [2]ESSID/ [3]Channel/ [4]Rate/ [5]WEP select

3.1.4.1	Network	Press [1]⇔to select Public	SIP setting	
			[1]Public	V

3.1.4.2	ESSID	Input ESSID number. Ex. dbtel Press Clear[鄕] ⇔ to modify the number.	渧 A 溴 ESSID: dbtel
		Press Ok [鄧] ⇔ to confirm the setting.	帝 A 淏 ESSID dbtell O.K. Clear Ok
3.1.4.3	Channel	Press [1]⇔to select Auto	SIP setting [1]Auto v
3.1.4.4	Rate	 ⇒ to setup Rate. Press [集]/[暠] Or [1], [2], [3], [4], [5] ⇒ to select[1]Auto/ [2]1M/ [3]2M/ [4]5.5M/ [5]11M 	SIP setting [1]Auto v [2]1M [3]2M Back Select
		Press Select [鄧] ⇔ to confirm the setting.	SIP setting [1]Au [2]1M [3]2M Back Select
3.1.4.5	WEP select	⇔ to setup WEP select. Press [集]/[暠] Or [1], [2], [3] ⇔ to select[1]None/ [2]64bits/ [3]128bits	SIP setting [1]None v [2]64bits [3]128bits Back Select
		Press Select[鄧] ⇔ to confirm the setting.	SIP setting [1]Non [2]64b 0.K. [3]128bits Back Select

3.1.5 Information

After System setting mode,

Press [集]/[暠] or [1]⇔ to select Information [1]Phone number [2]IP address [3]MAC ID Back Select

3.1.5.1	Phone number	View the phone number of handset. Ex. The phone number is 3	Information Phone number: 3 Back
3.1.5.2	IP address	View the IP address of handset. Ex. The IP address is 192.168.0.2	Information IP address: 192.168.0.2 Back
3.1.5.3	MAC ID	View the MAC ID of handset. Ex. The MAC ID is 00026bff0123	Information MAC ID: 00026bff0123
3.1.5.4	Firmware ver.	View the Firmware version of handset. Ex. The Firmware version is WD.00.0A	Information Firmware ver: WD.00.0A Back
3.1.5.5	Hardware ver.	View the Hardware version of handset. Ex. The Hardware version is DB168 ver0.1	Information Hardware ver: DB168 REV:0.1 Back

4. Firmware Download Procedure for MH210

To download firmware to MH210, a Web Browser (Internet Explorer version6.0 or later) is required.

How to update firmware via Web browser (For later than WD000B3)

- 1. Turn on the handset and ensure the AP signal is connected.
- 2. Browse with the handset IP address, for example 192.168.0.6



3. There comes up the screen: User Name: user, Password: 1111. Click OK after entering user name and password.

Cannot find server - Microsoft Intern File Edit Wew Favorites Tools He	it Explorer	-1012
=8∞1 + + + ♥ 🗈 🖄 ©tsearch	⊒Favorites @History 12 + @ ■ 3 %	
The page cannot be the page you are looking for is curren web site might to experiencing to	displayed	
Please try the following: Click the Portesh buttor If you typed the page add make sure that it is spelec To check your connection Tools menu, and then clic the Connections tab, clic settings should match that local area network (LAN) c service provider (ISP).	Please type your user name and password Site: 192.168.0.6 Pleadin: / User name User name Password C Sever this password in your password list OK Password	ame: user ord: 1111
 If your Network administral Microsoft Windows can examin automatically discover network settings (If you would like Windows to th them, click @ Detect Network Settin 5 one sites require 120-bit con Click the Help menu and then internet Explorer to determin security you have installed. 	your network and connection y and discover metion security. dick About a what strongth	

4. The setting screen comes up. The screen contains the contents of the Information folder of the handset.

Click "Update" to display the update setting screen.



5. The Update setting screen:



VoIP Gateway/F	Phone Web Conf	Iguration - Microsoft Inter	met Explorer			. 6 ×
Choose file		and the second		1×1		11
Look in:	Firmware2		• 🖻 😁 💽 •			
History History Desktep My Computer	File neme:	9. ftp wd000b10_jmg#p		Open	Click Open	<u> </u>
	Files of type:	All Files (*. ?)		Cancel		
		U	pdate Systen	n		
	Select F	ile		Browse UPD/	ATE	
RESTART		Information N Phone Book Wire	letwork OutBound Proxy eless DSP Setting S	<u>SIP</u> Proxy System Update	SAVE	
RESTART		Information N Phone Book Wire	letwork OutBound Proxy eless DSP Setting S	<u>SIP</u> Proxy System Update	SAV SAV	νE

6. Specify the route that the firmware is to be updated.

7. The update procedure starts when clicking UPDATE.

VoIP Gateway/Ph	one Web Configuration - Micro-	soft Internet Explorer	_ # ×
⇔Back + + - Q)	@History 최국 교 國 국 🕞 😽	
Address Address Address	2.168.0.6/index.htm	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	★ ∂°60
	DB	168-J VOIP IPPhone)
		Update Firmware	
	TFTP IP Address	192.168.0.30	
	File Name	wd000b8.ftp	
	Block Size	512	Update procedure
		SUBMIT CANCEL	takes 3-5 minutes, after clicking.
		Update System	
	Select File	C:\Firmware2\wd000b Browse	UPDATE
RESTART	Informa Phone Boo	ttion <u>Network</u> OutBound SIP Proxy Proxy k Wireless DSP Setting System Upda	
ឲ្			🙍 Internet

8. The handset displays the below screen when the update starts:



9. When the update is completed (100%), the handset show up; please wait for seconds.



10. The following procedure takes about 40 seconds; Please ensure not to turn off the handset, and ensure the power supply is sufficient for running procedure. To shutdown the power during this procedure might cause the fatal damage to the FLASH.



11. The icon "arrow" runs left to right about 10 seconds. Please ensure not to turn off the handset, and ensure the power supply is sufficient for running procedure.



12. The below screen tells the update procedure is completed. The handset will re-start. Please ensure not to turn off the handset, and ensure the power supply is sufficient for running procedure..



13. After the handset starts, the below screen comes up and the handset will restart again.:



* The handset restarts again.

14. After the second handset re-start is finished, the complete update procedure is finished.

15. Please click the "Information" to ensure the Software Version item is changed to the new version of the update firmware.

DB168-J VOIP IPPhone Device Information Software Version WD.00.0B10 Bootrom Version B.00.0F Release Date Nov 21 2003 Ethernet Port LAN x 1 Telephone Ports NONE	and led undertax	92.168.0.6,index.htm			. 6
Device InformationSoftware VersionWD.00.0B10Bootrom VersionB.00.0FThe "Update version" shows the UPDATE procedure accomplishedRelease DateNov 21 2003Shows the UPDATE procedure accomplishedEthernet PortLAN x 1procedure accomplishedTelephone PortsNONE		DB1	68-J VOIP IP	Phone	
Software VersionWD.00.0B10Bootrom VersionB.00.0FThe "Update version" shows the UPDATE procedure accomplishedEthernet PortLAN x 1procedure accomplishedTelephone PortsNONE			Device Informatio	n	
Bootrom VersionB.00.0FThe "Update version" shows the UPDATE procedure accomplishedRelease DateNov 21 2003The "Update version" shows the UPDATE procedure accomplishedEthernet PortLAN x 1procedure accomplishedTelephone PortsNONE		Software Version	WD.00.0B10		_
Release DateNov 21 2003shows the UPDATEEthernet PortLAN x 1procedure accomplishedTelephone PortsNONE		Bootrom Version	B.00.0F	The "Update version"	
Ethernet Port LAN x 1 procedure accomplished Telephone Ports NONE		Release Date	Nov 21 2003	shows the UPDATE	
Telephone Ports NONE				1 1 1 1 1	
		Ethernet Port	LAN x 1	procedure accomplished	
		Ethernet Port Telephone Ports	LAN x 1 NONE	procedure accomplished	
		Ethernet Port Telephone Ports	LAN x 1 NONE	procedure accomplished	_
		Ethernet Port Telephone Ports	LAN x 1 NONE	procedure accomplished	J
		Ethernet Port Telephone Ports	LAN x 1 NONE	procedure accomplished	
		Ethernet Port Telephone Ports	LAN x 1 NONE	procedure accomplished	_
		Ethernet Port Telephone Ports	LAN x 1 NONE	procedure accomplished	
		Ethernet Port Telephone Ports	LAN x 1 NONE	procedure accomplished	
RESTART Information Network OutBound SIP SAVE	RESTART	Ethernet Port Telephone Ports	NONE	SIP	SAVE

5. List of Configuration Menu

Simultaneously press [4]+[9]+[違] at the	"Power off"	state, then pr	ress [FNC] to	display o	configuration
menu.					

Menu	Paran	neter
[1] Information	[1] Phone number	
	[2] IP address	
	[3] MAC ID	
	[4] Firmware ver.	
	[5] Hardware ver.	
[2] Net setting	[1] Network mode	[1] DHCP
		[2] Fixed IP
	[2] IP address (Note)	
	[3] Subnet mask (Note)	
	[4] Gateway (Note)	
[3] SIP setting	[1] Server	[1] DNS IP
		[2] Port
		[3] Expire time
	[2] Proxy	[1] Proxy IP
		[2] Proxy port
	[3] User account	[1] Phone number
		[2] User name
		[3] User password
[4] WLAN setting	[1] Network mode	[1] Public
	[2] ESSID	
	[3] Channel	Channel 1
		Channel 2
		:
		Channel 11
	[4] Rate	[1] Auto
		[2] 1M
		[3] 2M
		[4] 5.5M
		[5] 11M
	[5] WEP select	[1] None
		[2] 64 bits
		[3] 128 bits

Note: When DHCP is selected, this item cannot be edited.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Body-worn operations are restricted to beltclips, holsters or similar accessories that have no metallic component in the assembly.