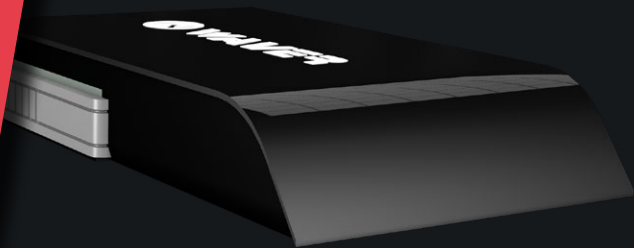




SMART **ONE**

QUICK START GUIDE

READ CAREFULLY BEFORE USING THE DEVICE



**WAC52N | WAC52N+
WAC52G | WAC52G+**

Package Contents

1. Waver® SmartOne Router
2. Ethernet Cable Cat5e
3. AC-DC 24 Volt Power Adapter
4. Quick Start Guide

Requirements

- OS: Windows Vista, Windows 7 or newer, Linux, Mac OS X or Android
- Web Browser: Chrome (Recommended), Mozilla Firefox or Apple Safari
- Broadband Internet Connection (Ethernet)

Thank you

for choosing our product!

Your satisfaction is our top priority.

Propose a feature that will be useful to be added on Waver SmartOne in the upcoming software updates at features@wavertech.eu

- Read this manual thoroughly before using Waver SmartOne
- To ensure proper use of the device, make sure to read “Safety Information” page
- After reading, keep it in a readily accessible place for future reference

CONTENTS

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- Hardware Overview	4
- Hardware Installation	5
- Device Management	7
- Firmware Update & Reset	23
- Multilingual Instructions	24
- Warranty and Returns	27
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- Technical Specifications	32

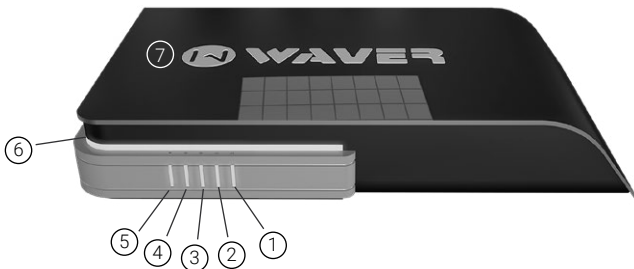
Safety Information

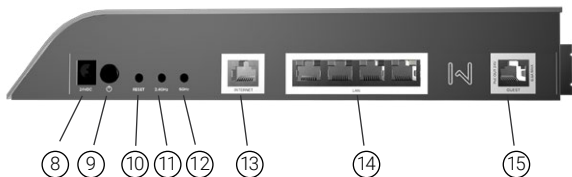
- Use only the supplied Power Adapter. Connection to a different power source may result in improper operation, damage or pose to fire hazard.
- Do not cover ventilation holes at the bottom. This product must be operated on a flat surface far from any heater or heating vent.
- Avoid direct irradiation of any strong light (such as sunlight)
- Keep at least 5 cm of clear space around the device
- Operating Temperature: - 20 - 60°C
- Operating Humidity: 10-90 % RH, Non-condensing
- Do not disassemble the product, or make repairs yourself. You run the risk of electric shock and voiding the warranty.
- Avoid water, moisture and wet locations.
- (N - Series Only) When using Power over Ethernet 24V Port to power another device, use properly wired CAT5e or upper category and make sure the equipment connected at this port does not exceed the 500mA rating of power consumption (!)



WARNING! Any users with implantable cardiac pacemakers should have this product apart the pacemaker by 30cm or longer. The pacemakers may be influenced by radio waves radiated from this product.

Hardware Overview



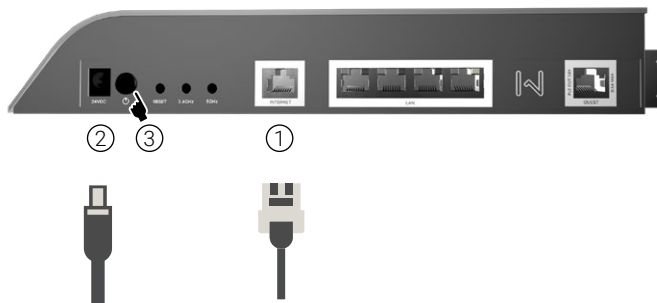


1. Power Led
2. Internet Port Led
3. 2.4GHz Wireless Interface Led
4. 5GHz Wireless Interface Led
5. Guest Ethernet Port Led
6. RGB Side Led
7. Logo Led
8. DC Power Jack
9. ON/OFF Switch
10. Reset to Factory Button
11. 2.4GHz Interface Button
12. 5GHz Interface Button
13. Internet Ethernet Port
14. LAN Ethernet Ports
15. Guest Ethernet Port
(N Series only - with PoE Out 24V)

Hardware Installation

To install the Waver SmartOne router, perform the following steps:

1. Connect Ethernet cable from you DSL/Cable modem to the INTERNET Port of Waver SmartOne Router.
2. Connect the DC Power Adapter to the router and to a power outlet.
3. Turn on router by pressing the ON/OFF switch to ON position.



The boot process will start. After a while the power LED will light up.

IMPORTANT

NEVER DISCONNECT POWER OR TURN OFF THE DEVICE

- a. During the boot process (it takes about 1 minute and 30 seconds to boot up)
- b. During Reboot process
- c. During Factory Reset process
- d. During Firmware update process

- Turning off the device or disconnecting power source during the above processes, can corrupt flash image and can make the device unbootable!

- To turn off the device, make sure boot process has finished (Power, Logo and side RGB Leds are ON).

- Always push the ON/OFF switch to OFF position before unplugging the DC Adapter.

Device Management

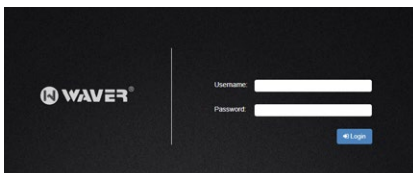
Device can be managed via any web browser. Access to the web interface is available from LAN Ports, Local WiFi Interfaces (local network) and Internet Port.

Web Management tools

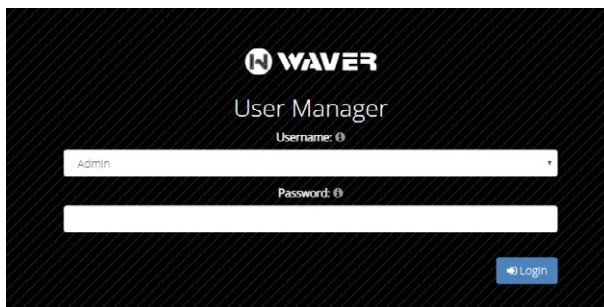
1. Administration Interface

Default access:
<http://192.168.10.1>

Username: **admin**
Password: **waver**



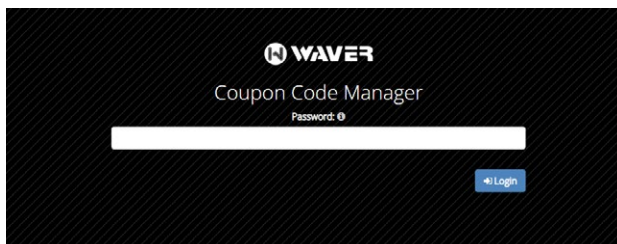
2. User manager Interface

The screenshot shows the Waver User Manager login page. At the top center is the Waver logo, which consists of a stylized 'W' inside a circle followed by the word 'WAVER' in a bold, sans-serif font. Below the logo, the text 'User Manager' is displayed in a large, white, sans-serif font. Underneath, there are two input fields: the first is labeled 'Username: @' and contains the text 'Admin'; the second is labeled 'Password: @' and is currently empty. A blue 'Login' button with a white arrow icon is positioned in the bottom right corner of the form area.

User Manager “**admin**” password: **waver**
Default access: <http://192.168.10.1/userman/>
(same account with administration interface)


User Manager “**manager**” password: **password**
Default access: <http://192.168.10.1/userman/>
(limited access account for accessing User Manager)

3. Discount Coupon Code manager

The screenshot shows the Waver Coupon Code Manager login page. At the top center is the Waver logo, which consists of a stylized 'W' inside a circle followed by the word 'WAVER' in a bold, sans-serif font. Below the logo, the text 'Coupon Code Manager' is displayed in a large, white, sans-serif font. Underneath, there is a single input field labeled 'Password: @' which is currently empty. A blue 'Login' button with a white arrow icon is positioned in the bottom right corner of the form area.

Discount Code Manager password: **password**
Default access: <http://192.168.10.1/coupons/>

4. Customization Panel (Whitelabeling)

Customization Unique Key 

 Show

 Login

To access this panel, you are going to need a unique customization key. This key is being generated separately for each device.

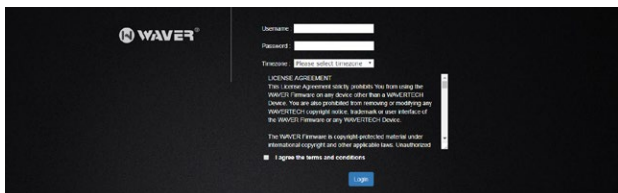
1. Administration Interface

The main administration interface. Networking, guest session, captive portal settings, customization and management for the local device. General system settings and statistics are also available here.

1. To login to the the Administration interface connect with an Ethernet cable to a LAN port or wirelessly to a Local WiFi interface.
2. Launch your Web browser and type `http://192.168.10.1` in the address field.

Press enter (PC) or return (Mac).

Note: Your computer needs to be on the 192.168.10.x subnet. If you have DHCP Client enabled on your network adapter, it will receive an IP Address automatically. If not, you will need to set a static IP address in the 192.168.10.2 - 192.168.10.254 range.

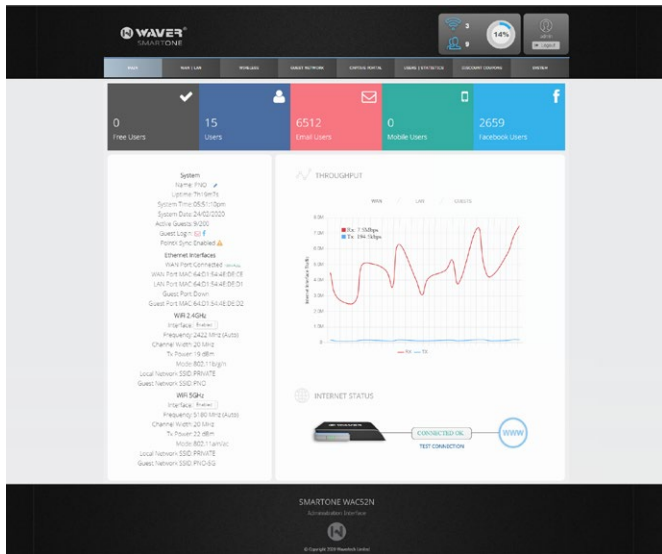


The screenshot shows the Waver login page. On the left is the Waver logo. On the right, there are input fields for 'Username' and 'Password', and a 'Remember Me' checkbox. Below these is a 'LICENSE AGREEMENT' section with small text. At the bottom, there is a checkbox for 'I agree to the terms and conditions' and a 'Login' button.

3. Enter “**admin**” as username and “**waver**” as password, select the proper region and time zone (correct time zone is very important for database synchronization and other critical device functions). Read carefully the end user license agreement. If you agree with all the terms you can check the “I agree the terms and conditions” checkbox and click on the “Login button”.

4. The **MAIN** page of configuration interface will appear. You are logged in and you can configure your Waver SmartOne router.

An overview on the administration interface



WAN | LAN

Configures Internet connectivity type, Firewall and Port forwarding, Website Filtering and Local Network Settings.

The screenshot displays the Waver Smartone WAC52N Administration Interface. At the top, there is a navigation bar with the Waver Smartone logo and several utility icons: a Wi-Fi signal icon with '2', a user icon with '9', a circular progress indicator at '19%', and an 'admin' profile icon with a 'Logout' button. Below the navigation bar is a menu with tabs for WAN, LAN, WIRELESS, GUEST NETWORK, CAPTIVE PORTAL, USERS | STATISTICS, DISCOUNT COUPONS, and SYSTEM. The 'WAN' tab is selected, and the 'WAN CONFIGURATION' sub-tab is active. The main content area features a 'WAN CONFIGURATION' icon on the left and a configuration panel on the right. The panel is titled 'WAN Connection Type' and shows a dropdown menu set to 'Automatic IP Address (DHCP Client)'. Below this is a green 'Enable DHCP Client' button. A table lists the following settings: IP Address (0.0.0.0), Gateway (0.0.0.0), Primary DNS (0.0.0.0), Secondary DNS (0.0.0.0), and Lease Time Left (5h3m45s). At the bottom of the configuration panel, there is an information icon and a note: 'Here you can choose the way that this router will connect to the Internet. By default the device is set to obtain an IP address automatically from a DHCP Server. WAN Connection types supported are Dynamic IP allocation (DHCP Client), Static IP configuration and PPPoE username and password authentication.' The footer of the interface includes the text 'SMARTONE WAC52N Administration Interface', the Waver logo, and the copyright notice '© Copyright 2020 Waverack Limited'.

WIRELESS

Shows wireless interface information and statistics,
Configures interface and wireless networks settings.

The screenshot displays the administration interface for a Waver Smartone WAC52N device. The top navigation bar includes the Waver Smartone logo and several utility icons: a Wi-Fi signal strength indicator (5 bars), a battery level indicator (12%), and a user profile icon (admin) with a Logout button. Below the navigation bar, the 'WIRELESS' tab is selected, and the 'CONNECTED DEVICES' sub-tab is active. The main content area shows a table of wireless interfaces with columns for Interface, MAC Address, RX Rate, TX Rate, Uptime, Signal, Last IP, and Encryption. A 'Blocked WiFi Devices' button is visible in the top right of the table area. A search bar is located below the table. At the bottom of the interface, there is a footer with the device name 'SMARTONE WAC52N', the text 'Administration Interface', a logo, and the copyright notice '© Copyright 2020 WaverTech Limited'.

CONNECTED DEVICES
All wireless interfaces

Show 10 entries

Blocked WiFi Devices

Interface	MAC Address	RX Rate	TX Rate	Uptime	Signal	Last IP	Encryption	
Local-5GHz	F4:D1:08:DD:0A:54	86.6Mbps-20MHz/15/SGI	86.6Mbps-20MHz/15/SGI	11h21m6s	-53dBm	192.168.1.203	WPA2	Block
Local-2.4GHz	0C:CE:F6:7F:8C:2D	65Mbps-20MHz/1S	21.6Mbps-20MHz/1S/SGI	21h25m9s	-64dBm	192.168.1.141	WPA2	Block
Local-2.4GHz	0C:CE:F6:87:8F:99	58.5Mbps-20MHz/1S	58.5Mbps-20MHz/1S	4h59m12s	-66dBm	192.168.1.131	WPA2	Block
Local-2.4GHz	0C:CE:F6:8F:57:6D	65Mbps-20MHz/1S	57.7Mbps-20MHz/1S/SGI	9h19m25s	-72dBm	192.168.1.144	WPA2	Block
Local-2.4GHz	F0:03:9C:54:A2:D7	24Mbps	72.2Mbps-20MHz/1S/SGI	1h5m30s	-73dBm	192.168.1.142	WPA2	Block

Showing 1 to 5 of 5 entries

This page displays information about the actual devices connected on your wireless networks. You have the ability to block access to any unwanted wireless device using the "Block" button. To manage blocked devices, open the blocked device list by clicking on "Blocked WiFi Devices".

SMARTONE WAC52N
Administration Interface

© Copyright 2020 WaverTech Limited

GUEST NETWORK

Configures network parameters for guest network. It shows information regarding devices on the guest network.

The screenshot displays the 'GUEST NETWORK' configuration page in the Waver Smartone administration interface. The top navigation bar includes 'MAIN', 'WAN | LAN', 'WIRELESS', 'GUEST NETWORK', 'CAPTIVE PORTAL', 'USERS | STATISTICS', 'DISCOUNT COUPONS', and 'SYSTEM'. The 'GUEST NETWORK' menu is active, showing sub-options: 'GUEST SESSION', 'ACTIVE GUESTS', 'GUESTS GRAPH', 'GUEST IP SETTINGS', 'NETWORK HOSTS', 'GUEST ETHERNET', 'GUEST DHCP LEASES', 'GUEST FEEDBACK', and 'WALLED GARDEN'.

The main content area is divided into two panels:

- Bandwidth and Device Settings:** Control Bandwidth and Device Limits for Guest Network. It features two sliders: 'Network Maximum Download Speed (k)' set to 40 Mbps and 'Network Maximum Upload Speed (k)' set to 10 Mbps. A 'Save' button is at the bottom right. Below the sliders are expandable sections for '+ Free, Facebook, Email, Mobile Guest Limits' and '+ Username Guest Limits'.
- Time Session Settings:** Control Time Session Limits for Guest Network. It features two sliders: 'Guest Session Time Limit (k)' set to 5 Days and 'Guest Reconnection Time (k)' set to immediately. A 'Save' button is at the bottom right. Below the sliders is an expandable section for '+ Session Settings'.

A note at the bottom of the interface states: 'Here you can control bandwidth and session related limits for the guest network. Limit overall guest network speed, user session time, download and upload speed per device, concurrently connected devices with the same username etc. Note: Setting affects users connected on your guest Ethernet and Wireless interfaces.'

The footer contains the text 'SMARTONE WACS2N Administration Interface' with the Waver logo and '© Copyright 2020 WaverTech Limited'.

CAPTIVE PORTAL

Configures the guest landing page appearance and the way guests are authenticated on your guest network.

The screenshot displays the 'Waver SMARTONE' Captive Portal Administration Interface. The top navigation bar includes sections for MAIN, WAN | LAN, WIRELESS, GUEST NETWORK, CAPTIVE PORTAL (active), USERS | STATISTICS, DISCOUNT COUPONS, and SYSTEM. The CAPTIVE PORTAL section is further divided into sub-tabs: CAPTIVE, AUTHENTICATION, SMS VALIDATION, TERMS & PRIVACY, CONNECTED, FEEDBACK, THEME EDITOR, IMAGES & VIDEO, and PORTAL BACKUP. The main content area is titled 'Captive Portal Page' and features a 'Reset All Settings' button. The configuration is organized into three columns: 'PORTAL THEME' (with options for 'Custom Background' and 'Selected Theme Defa...'), 'VIDEO SETTINGS' (with checkboxes for 'AUTOPLAY VIDEO (MUTED)', 'ENABLE VIDEO CONTROLS', 'SHOW VIDEO IN FIRST PAGE', 'SHOW VIDEO IN AUTH PAGE', and 'FORCE GUEST TO WATCH VIDEO BEFORE LOGIN'), and 'IMAGE SETTINGS' (with checkboxes for 'SHOW IMAGES AS A SLIDER', 'SHOW IMAGES IN FIRST PAGE', and 'SHOW IMAGES IN AUTH PAGE'). A 'Save' button is located at the bottom of the settings panel. To the right, a preview window shows a sample captive portal page with a background image of a lake at night, a 'Connection to our Wifi' heading, a disclaimer about terms and privacy policy, a 'Read our Terms & Privacy Policy' link, a radio button for 'I agree with the terms of use', and a 'Connect to Wifi' button. The footer of the interface identifies the system as 'SMARTONE WAC52N Administration Interface' and includes a copyright notice for '© Copyright 2020 Waverhock Limited'.

GUEST USERS | STATISTICS

Analytic guest user data statistics. The synchronization of user data with third party or external systems can also be managed on this page.



DISCOUNT COUPONS

Controls the discount coupons and Email/SMS discount coupons generation. Discount coupons are based on guest visit count (user login counting).

The screenshot displays the 'Waver SMARTONE' administration interface. The top navigation bar includes links for MAIN, MAIN | LAN, WIRELESS, GUEST NETWORK, CAPTIVE PORTAL, USERS | STATISTICS, DISCOUNT COUPONS (active), and SYSTEM. On the right, there are status indicators for wireless users (3), mobile users (9), and a 2% discount rate, along with a user profile and login button.

The main content area is titled 'Coupons Add Coupon' and features a 'Return' button. Below the title are tabs for 'COUPON DETAILS' (selected), 'EMAIL COUPON', and 'SMS COUPON'.

The 'COUPON DETAILS' form includes the following fields and options:

- TITLE***: 20% Discount on 5 visits
- ACTIVE**:
- SEND TO EMAIL USERS**:
- SEND TO FACEBOOK USERS**:
- SEND TO MOBILE USERS**:
- COUPON SEND FROM:** 2020-02-24
- COUPON SEND UNTIL:** 2020-03-24
- AMOUNT***: 20 (with currency options: €, \$, %)
- CURRENCY:** Dollars
- VISIT COUNT TO SEND:** 5
- SEND COUPON:** Immediately
- COUPON VALIDITY PERIOD:** CUSTOM DATES, DAYS AFTER RECEIVED
- COUPON VALID FROM:** 2020-02-24
- COUPON VALID UNTIL:** 2020-03-24

A 'Save' button is located at the bottom right of the form.

The footer of the interface reads: SMARTONE WACS2N Administration Interface, with a logo and copyright notice: © Copyright 2010 Wavech Limited.

SYSTEM

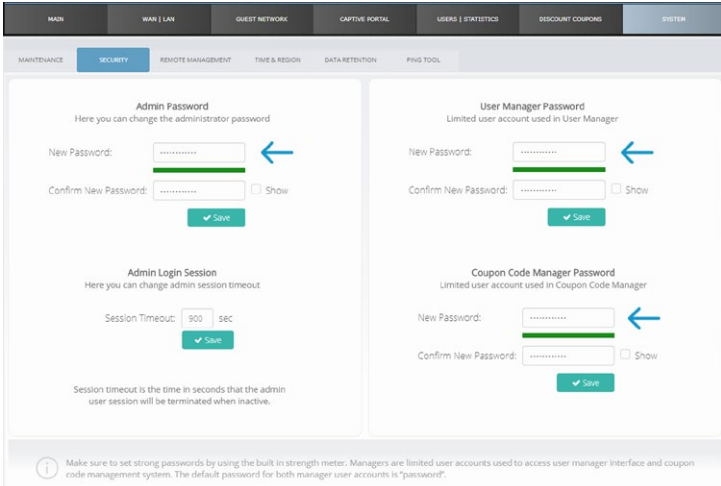
Gives you access to system settings, security, data retention and system timezone. Here you will find also firmware update and networking tools.

The screenshot displays the Waver Smartone Administration Interface. At the top left is the Waver Smartone logo. The top right corner features status indicators: a Wi-Fi signal strength icon with the number 3, a battery level icon showing 1%, and a user profile icon with the name 'Admin' and a 'Logout' button. Below these is a navigation menu with tabs for MAIN, WAN | LAN, WIRELESS, GUEST NETWORK, CAPTIVE PORTAL, USERS | STATISTICS, DISCOUNT COUPONS, and SYSTEM. A secondary menu below includes MAINTENANCE (highlighted), SECURITY, REMOTE MANAGEMENT, TIME & REGION, DATA RETENTION, LED CONTROLLER, and PING TOOL. The main content area is titled 'Firmware Update' and shows 'Current Firmware: WS2N - ver:1.7'. It contains a 'Choose File' button (with 'No file chosen' text) and an 'Update Firmware' button. Below this is a 'System reboot and reset' section with the text 'Reboot or reset device to factory settings' and two buttons: 'Reboot device' and 'Reset to default'. A footer note states: 'Always keep backups with your configuration and export user data from device before updating firmware or resetting to factory settings. Manufacturer releases new versions in order to improve product performance and add new features. Check the quick start guide or manufacturer website for update instructions.' The bottom of the interface shows 'SMARTONE WACS2N Administration Interface' and a copyright notice: '© Copyright 2020 WaverTech Limited'.

Securing the device

- 1 - Login to the Administration interface
- 2 - Go to SYSTEM - SECURITY tab

A. Enter a strong password in all the new password fields as made below



The screenshot shows the Administration interface with the SECURITY tab selected. It contains four password management sections:

- Admin Password:** "Here you can change the administrator password." Fields for "New Password:" and "Confirm New Password:" with a "Show" checkbox and a "Save" button. A blue arrow points to the "New Password" field.
- Admin Login Session:** "Here you can change admin session timeout." A "Session Timeout:" field set to "900" seconds with a "Save" button. A note below states: "Session timeout is the time in seconds that the admin user session will be terminated when inactive."
- User Manager Password:** "Limited user account used in User Manager." Fields for "New Password:" and "Confirm New Password:" with a "Show" checkbox and a "Save" button. A blue arrow points to the "New Password" field.
- Coupon Code Manager Password:** "Limited user account used in Coupon Code Manager." Fields for "New Password:" and "Confirm New Password:" with a "Show" checkbox and a "Save" button. A blue arrow points to the "New Password" field.

An information icon at the bottom left of the page indicates: "Make sure to set strong passwords by using the built-in strength meter. Managers are limited user accounts used to access user manager interface and coupon code management system. The default password for both manager user accounts is 'password'."

B. Enter the same password in each confirm new password field and click the "Save" button



Securing Local Wireless Networks

In the Administration interface
go to WIRELESS -> LOCAL WIRELESS tab.

The screenshot shows the 'LOCAL WIRELESS' configuration page. At the top, there are navigation tabs: MAIN, WAN | LAN, WIRELESS (selected), GUEST NETWORK, and CAPTIVE PORTAL. Below these are sub-tabs: CONNECTED DEVICES, DEVICES GRAPH, RADIO SETTINGS, LOCAL WIRELESS (selected), and GUEST WIRELESS. The main content area is titled 'LOCAL 2.4 GHz' with 'Wireless 802.11 b/g/n' on the right. There are four main settings:

- ENABLE THIS NETWORK
- SSID:
- ENABLE SECURITY
- WPA2 Key: Show

At the bottom, there is a ENABLE ON/OFF SCHEDULER ⓘ and a green 'Save' button with a checkmark.

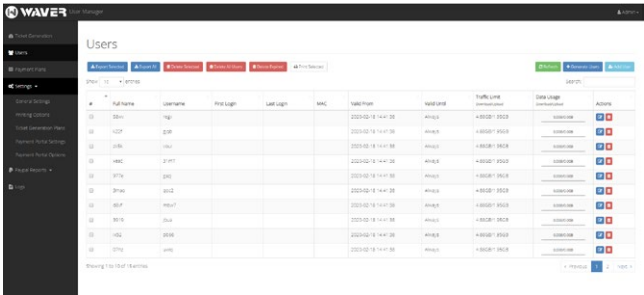
- A.** Enter a name for your wireless network in the SSID field
- B.** Enable security for wireless network
- C.** Enter a passphrase in the WPA2 Key field
- D.** Click on the “Save” button



The same way you can manage SSID and Security for Local 5GHz and guest wireless interfaces

2. User Manager

A powerful Web tool for managing user/pass credentials used by Username authentication in captive portal and payment portal. With user manager you can customize Printable tickets, Payment Portal appearance, Payment plans pricing, limits etc. It reports to admin details like PayPal Statistics, Logging of users adding or removal. User Manager is mobile friendly and has a limited user account called "manager" for use by employees.



The screenshot shows the Waver User Manager interface. The main content area is titled "Users" and contains a table with columns for ID, Full Name, Username, First Login, Last Login, MAC, Valid From, Valid Until, Traffic Limit, Data Usage, and Actions. The table lists 10 users with their respective details. The interface also includes a sidebar with navigation options like "Users", "Payment Plans", "Settings", "General Settings", "Billing Control", "Ticket Generation", "Payment Portal Settings", "Payment Portal Options", "Payment Reports", and "Log".

ID	Full Name	Username	First Login	Last Login	MAC	Valid From	Valid Until	Traffic Limit	Data Usage	Actions
01	Bob	bob				2024-02-18 14:47:30	4946.8	+80281 850.8	0.000000	E D
02	COF	cof				2024-02-18 14:47:30	4946.8	+80281 850.8	0.000000	E D
03	JOE	joe				2024-02-18 14:47:30	4946.8	+80281 850.8	0.000000	E D
04	HEC	hec				2024-02-18 14:47:30	4946.8	+80281 850.8	0.000000	E D
05	RTN	rtn				2024-02-18 14:47:30	4946.8	+80281 850.8	0.000000	E D
06	BRN	brn				2024-02-18 14:47:30	4946.8	+80281 850.8	0.000000	E D
07	WSP	wsp				2024-02-18 14:47:30	4946.8	+80281 850.8	0.000000	E D
08	RTS	rts				2024-02-18 14:47:30	4946.8	+80281 850.8	0.000000	E D
09	HSG	hsg				2024-02-18 14:47:30	4946.8	+80281 850.8	0.000000	E D
10	DTG	dtg				2024-02-18 14:47:30	4946.8	+80281 850.8	0.000000	E D



API Access

User/pass management via HTTP API

3. Discount Coupon Codes Manager

A mobile friendly coupon code manager tool for use by employees to check coupon code validity and redeem the active ones.

Discount coupons generation can be managed by Administration Interface -> DISCOUNT COUPONS tab.

The screenshot displays the 'WAVER' Discount Coupon Codes Manager interface. At the top, there are three summary cards: 'All Codes' with a count of 9, 'Available Codes' with a count of 5, and 'Redeemed Codes' with a count of 4. Below these cards is a section titled 'Available Codes' with a '+ Add New Code' button and a search bar. The main content is a table with the following columns: ID, Coupon Code, Discount, Created, Valid From, Valid Until, and Action. The table lists five coupon codes, each with a 'Redeem' button. The bottom of the table shows 'Showing 1 to 5 of 5 entries' and 'Previous Next' navigation buttons.

ID	Coupon Code	Discount	Created	Valid From	Valid Until	Action
988221	20%	20%	2018-05-28 19:28:07	2018-05-24	2018-07-08	Redeem
32VAD65J	1Beer	1Beer	2018-05-28 19:28:07	2018-05-24	2018-07-08	Redeem
2V4379T	5K	5K	2018-05-28 19:28:07	2018-05-24	2018-07-09	Redeem
2V1E46L6	1Beer	1Beer	2018-05-28 02:18:21	2018-05-24	2018-05-30	Redeem
44V814E	5K	5K	2018-05-28 02:18:21	2018-05-24	2018-05-30	Redeem

4. Customization Panel (White labeling)

\$ PAID FEATURE (one-time purchase)

Customization panel gives the ability to companies and integrators to modify the software and use their own logo, page titles and EULA texts instead of Waver defaults. Changes are permanent, which means that even a full factory reset will not affect these settings.

Customization Panel

⚠ These settings are permanent and are not affected by a factory reset

Enable Customization ⓘ

Images



Main Login panel logo
PNG Only - Recommended 200x230px



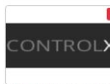
User Manager logo
PNG Only - Recommended 172x40px



Coupon Manager logo
PNG Only - Recommended 172x42px



Admin Interface Main logo
PNG Only - Recommended 183x33px



Admin Interface Secondary logo
PNG Only - Recommended 131x23px

I Text

Admin Interface Footer text

Administration Interface

Admin Interface Copyright text

© Copyright 2020 Wavertech Limited

Page Title prefix

WAVER

First boot End User License Agreement text

Change on your own responsibility

END USER LICENSE AGREEMENT

This License Agreement strictly prohibits You from using the WAVER Firmware on any device other than a WAVERTECH Device. You are also prohibited from removing or modifying any WAVERTECH copyright notice, trademark or user interface of the WAVER Firmware or any WAVERTECH Device.

The WAVER Firmware is copyright-protected material under international copyright and other applicable laws. Unauthorized copying, use or modification of ANY PART of this firmware, or violation of the terms of this Agreement, will be prosecuted under the law.

NOTICE

This is an agreement between You and WAVERTECH LTD, ("WAVERTECH"), YOU MUST READ AND AGREE TO THE TERMS OF THIS FIRMWARE LICENSE AGREEMENT ("AGREEMENT") BEFORE ANY WAVER FIRMWARE CAN BE DOWNLOADED, INSTALLED OR USED. BY CLICKING ON THE "ACCEPT" BUTTON OF THIS AGREEMENT, OR DOWNLOADING WAVER FIRMWARE, OR INSTALLING WAVER FIRMWARE, OR USING WAVER FIRMWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE WITH THE TERMS AND CONDITIONS OF THIS AGREEMENT, THEN YOU SHOULD EXIT THIS PAGE AND NOT



Please contact sales@wavertech.eu in order to obtain your unique customization key

Firmware Update & Reset

UPDATE PROCEDURE:

- 1 - Download device firmware from our website
- 2 - Login to the Administration interface
- 3 - Go to SYSTEM - MAINTENANCE tab
- 4 - Upload the downloaded .bin firmware file
- 5 - Press the reboot button and confirm when you will be prompted to reboot the device
- 6 - Wait a few minutes until the boot procedure finishes up (approx 3 minutes)

FACTORY RESET:

WARNING! This will delete all stored user data and restore all settings to factory defaults.

Method 1. Using Software

Use the "Reset to default" function in Administration Interface
-> SYSTEM - MAINTENANCE tab.

Method 2. Using reset button

Using a tool, hold and press the reset button. After 2 seconds, the RGB side LED will start blinking in yellow. Continue pressing the button for 10 seconds. The side LED will continue to blink after release. The factory reset procedure will start in a while and the LED will start blinking in red color.

Multilingual Instructions

EN. Instruction manual:

Connect the power adapter to turn on the device. Open 192.168.10.1 in your web browser, to configure it. More information on <https://www.wavertech.eu/downloads>

BG. Инструкция:

Свържете адаптера на захранване, за да включите устройството. Отворете 192.168.10.1 в уеб браузър, за да настроите продукта. Повече информация в <https://www.wavertech.eu/downloads>

CZ. Navod k použit:

Připojte napájecí adapter k zapnutí přístroje. Otevřete 192.168.10.1 ve webovém prohlížeči pro konfiguraci produktu. Více informací najdete v <https://www.wavertech.eu/downloads>

DK. Instruktionsbog:

Tilslut stromadapteren for at tænde for enheden. Åbn 192.168.10.1 i en webbrowser til at konfigurere produktet. Mere information i <https://www.wavertech.eu/downloads>

FR. Mode d'emploi:

Connectez l'adaptateur d'alimentation pour allumer l'appareil. Ouvrez 192.168.10.1 dans un navigateur Web pour configurer le produit. Plus d'informations dans <https://www.wavertech.eu/downloads>

DE. Bedienungsanleitung:

Verbinden Sie das Netzteil, um das Gerät einzuschalten. Öffnen Sie 192.168.10.1 in einem Web-Browser, um das Produkt zu konfigurieren. Weitere Informationen im <https://www.wavertech.eu/downloads>

EE. Kasutusjuhend:

Uhendage toiteadapter seadme sisselulitamiseks. Avatud 192.168.10.1 in veebilehitseja seadistada toodet. Rohkem teavet <https://www.wavertech.eu/downloads>

ES. Manual de instrucciones:

Conecte el adaptador de alimentación para encender la unidad. Abra 192.168.10.1 en un navegador web para configurar el producto. Mas informacion en <https://www.wavertech.eu/downloads>

IT. Manuale di istruzioni:

Collegare l'adattatore di alimentazione per accendere l'unità. Aprire 192.168.10.1 in un browser Web per configurare il prodotto. Maggiori informazioni in <https://www.wavertech.eu/downloads>

LV. Lietošanas instrukcija:

Pievienojiet Strāvas adapteri, lai ieslēgtu ierīci. Atvērt 192.168.10.1 ar interneta pārlūku, lai konfigurētu produktu. Plašāka informācija <https://www.wavertech.eu/downloads>

LT. Naudojimosi instrukcija:

Prijunkite maitinimo adapterį įjunkite įrenginį. Į interneto naršyklę 192.168.10.1 Atidarykite galite konfigūruoti gaminį. Daugiau informacijos rasite <https://www.wavertech.eu/downloads>

HU. Hasznalati utasitas:

Csatlakoztassa a halozati adaptert a keszulek bekapcsolasahoz. Megnyitasa 192.168.10.1 egy webbongeszoben beallitani a termeket. Tobb informacio <https://www.wavertech.eu/downloads>

NL. Handleiding:

Sluit voedingsadapter aan op het apparaat in te schakelen. Open 192.168.10.1 in een webbrowser om het product te configureren. Meer informatie in <https://www.wavertech.eu/downloads>

PL. Instrukcja obsługi:

Podłącz adapter zasilania, aby włączyć urządzenie. Otwórz 192.168.10.1 w przeglądarce internetowej, aby skonfigurować urządzenie. Więcej informacji w <https://www.wavertech.eu/downloads>

PT. Manual de instrucoes:

Conecte o adaptador de alimentacao para ligar o aparelho. Abra 192.168.10.1 em um navegador da web para configurar o produto. Mais informacoes em <https://www.wavertech.eu/downloads>

RO. Instrucțiuni de utilizare :

Conectați adaptorul de alimentare pentru a porni aparatul. Deschide 192.168.10.1 într-un browser web pentru a configura produsul. Mai multe informații în <https://www.wavertech.eu/downloads>

SK. Navod na použitie:

Pripojte napajací adapter k zapnutiu pristroja. Otvorte 192.168.10.1 vo webovom prehliadači pre konfiguráciu produktu. Viac informácií najdete v <https://www.wavertech.eu/downloads>

SI. Navodila:

Priključite napajalnik za vklop naprave. Odprite 192.168.10.1 v spletnem brskalniku nastaviti izdelek. Več informacij v <https://www.wavertech.eu/downloads>

FI. Kayttoohje:

Kytke virtalahde paalle laitteen. Avaa 192.168.10.1 in selaimen maarittaa tuotteen. Lisaa tietoa <https://www.wavertech.eu/downloads>

SE. Instruktionsmanual:

Anslut natadaptren för att slä pa enheten. Öppna 192.168.10.1 i en webblasare för att konfigurera produkten. Mer information på <https://www.wavertech.eu/downloads>

NO. Bruksanvisningen:

Koble strømadapteren for å slå pa enheten. Åpne 192.168.10.1 i en nettleser for å konfigurere produktet. Mer informasjon på <https://www.wavertech.eu/downloads>

GR. Εγχειρίδιο οδηγιών:

Συνδέστε τον προσαρμογέα τροφοδοσίας για να ενεργοποιήσετε την συσκευή. Ανοίξτε 192.168.10.1 σε ένα πρόγραμμα περιήγησης στο Web για να διαμορφώσετε το προϊόν. Περισσότερες πληροφορίες στο <https://www.wavertech.eu/downloads>

Limited Warranty & Returns

WAVERTECH LTD. ("WAVERTECH") warrants that the product(s) provided hereunder (the "Product(s)") will be free from defects in material and workmanship for a period of twenty four (24) months. The warranty duration begins from the date of purchase by the customer from WAVERTECH or its authorized representatives. The warranty applies only under normal use and operation of the product.

WAVERTECH solely reserves the right to repair or replace the defective product. The removal and installation cost is not covered by this warranty. Any repair or replacement does not extend the duration of the warranty period.

The above limited warranty does not cover any cases of/or defects that arise due to:

- Not original products, which are not given a WAVERTECH Serial Number, or original signs, trademarks etc.
- Alterations, modifications or additions to the product unless those made by WAVERTECH, or WAVERTECH's authorized representatives, or as authorized by WAVERTECH in writing.
- Any kind of physical modifications of the product, including painting or rebranding.
- Damages due to wrong or defective cabling.
- Misuse, abuse, negligence, irregularly physical, electromagnetic or electrical stress, including lightning strikes, or accident.
- Malfunction or damage due to use of firmware not supplied/provided/supported by WAVERTECH.
- Products not being received by WAVERTECH within 30 days of issuance of the RMA.

The above limited warranty covers cases that:

- The product has been installed and used according to the written instructions.
- The Ethernet is connected with cable of CAT5 (or above), outdoor installations are connected with shielded - grounded Ethernet and indoor installations follow the required indoor cabling instructions.

Returns of defective products

During the warranty period defective products are accepted for repair or replacement only if they are accompanied by a Return Materials Authorization (RMA) number from WAVESTECH, details on the RMA process are available at: <https://www.wavestech.eu/support> under the Returns Policy section. Products shipped to WAVESTECH without a RMA number will not be processed and will be returned or subject to disposal.

Disclaimer of Warranty

EXCEPT FOR THE WARRANTIES EXPRESSLY PROVIDED ABOVE AND TO THE EXTENT LAWFULLY PERMITTED, WAVESTECH DOES NOT WARRANT FOR ANY INCIDENTAL, CONSEQUENTIAL, DIRECT OR INDIRECT DAMAGES, INCLUDING WITHOUT RESTRICTION DAMAGES OR LOSSES RESULTING FROM USE OR MALFUNCTION OF WAVESTECH PRODUCTS, COMPROMISE OR CORRUPTION OF DATA, LOSS OF BUSINESS OR PROFITS, REPARATION COSTS. THE ABOVE LIMITATION CLAUSE MAY NOT APPLY ONLY IN LEGAL ORDERS, WHERE IT IS PROHIBITED BY THE LAW.

Any and all other warranties are explicitly excluded.

This warranty is governed and interpreted according to the legal order of the country of purchase of the WAVESTECH product.

Declaration of Conformity (CE)

[EN] English

Hereby, WEVERTECH declares that the product WEVER SMART ONE is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

[BG] Bulgarian

С настоящето, WEVERTECH декларира, че WEVER SMART ONE е в съответствие със съществените изисквания и другите приложими разпоредби на Директива 2014/53/EU.

[CZ] Czech

WEVERTECH tímto prohlašuje, že WEVER SMART ONE splňuje základní požadavky a všechna příslušná ustanovení Směrnice 2014/53/EU.

[DK] Danish

Undertegnede WEVERTECH erklærer herved, at følgende udstyr WEVER SMART ONE overholder de væsentlige krav og øvrige relevante krav i direktiv 2014/53/EU.

[DE] German

Hiermit erklart WEVERTECH dass sich das Gerat WEVER SMART ONE in Ubereinstimmung mit den grundlegenden Anforderungen und den ubrigen einschlagigen Bestimmungen der Richtlinie 2014/53/EU befindet.

[EE] Estonian

Kaesolevaga kinnitab WEVERTECH seadme WEVER SMART ONE vastavust direktiivi 2014/53/EU pohinouetele ja nimetatud direktiivist tulenevatele teistele asjakohastele satetele.

[GR] Greek

ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Ο ΚΑΤΑΣΚΕΥΑΣΤΗΣ WEVERTECH ΔΗΛΩΝΕΙ ΟΤΙ ΤΟ ΠΡΟΙΟΝ WEVER SMART ONE ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 2014/53/EU.

[ES] Spanish

Por la presente, WEVERTECH declara que este WEVER SMART ONE cumple con los requisitos esenciales y otras exigencias relevantes de la Directiva 2014/53/EU.

[IT] Italian

Con la presente WEVERTECH dichiara che questo WEVER SMART ONE è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 2014/53/EU.

[LV] Latvian

Ar šo WEVERTECH deklarē, ka WEVER SMART ONE atbilst Direktīvas 2014/53/EU būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

[LT] Lithuanian

Siuo WEVERTECH deklaruoja, kad šis WEVER SMART ONE atitinka esminius reikalavimus ir kitas 2014/53/EU Direktyvos nuostatas.

[HU] Hungarian

A WEVERTECH ezzennel kijelenti, hogy a WEVER SMART ONE típusu beren-dezes teljesíti az alapvető követelményeket és más 2014/53/EU irányelvben meghatározott vonatkozó rendelkezéseket.

[NL] Dutch

Hierbij verklaart WEVERTECH dat het toestel I WEVER SMART ONE in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 2014/53/EU.

[PL] Polish

Niniejszym WEVERTECH deklaruje że WEVER SMART ONE jest zgodny z zasadniczymi wymaganiami i innymi właściwymi postanowieniami Dyrektywy 2014/53/EU.

[PT] Portuguese

Eu, WEVERTECH declaro que o WEVER SMART ONE cumpre os requisitos essenciais e outras provisões relevantes da Directiva 2014/53/EU.

[RO] Romanian

Prin prezenta, WEVERTECH declară că aparatul WEVER SMART ONE este în conformitate cu cerințele esențiale și cu alte prevederi pertinente ale Directivei 2014/53/EU.

[SK] Slovak

WAVERTECH týmto vyhlasuje, že WAVER SMART ONE spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 2014/53/EU.

[SI] Slovenian

WAVERTECH izjavlja, da je ta WAVER SMART ONE v skladu z bistvenimi zahtevami in drugimi relevantnimi določili direktive 2014/53/EU.

[FI] Finish

WAVERTECH vakuuttaa taten etta WAVER SMART ONE tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sita koskevien direktiivin muiden ehtojen mukainen.

[SE] Swedish

Harmed intyggar WAVERTECH att denna WAVER SMART ONE ar i overensstammelse med de vasentliga egenskapskrav och ovriga relevant bestämmelser som framgar av direktiv 2014/53/EU.

[NO] Norwegian

WAVERTECH Erklarer herved at WAVER SMART ONE er i samsvar med de grunnleggende krav og ovrige relevante krav i direktiv 2014/53/EU.

CE Marking

CE Marking on this product represents that this product is in compliance with all directives that are applicable to it.

Product can be used in the following EU Countries:

AT	BE	BG	CY	CZ	DE	DK	EE	EL
ES	FI	FR	HR	HU	IE	IT	LV	LT
LU	MT	NL	PL	PT	RO	SE	SI	SK

Technical Specifications

Model WAC52N/WAC52N+

Fast Ethernet Interfaces	1x WAN/Internet, 4x LAN, 1x Guest Port With Passive PoE out
Wireless Interfaces	Dual Chain 2.4GHz 802.11b/g/n Single Chain 5GHz 802.11a/n/ac
Concurrent Active Guests	200 - WAC52N Model 500 - WAC52N+ Model
Buttons	Power On/Off, Factory Reset 2.4GHz Radio, 5GHz Radio
Maximum supported WAN Throughput	100 Mbps
LEDs	Logo, Corner RGB-Multicolor, Power, WAN/Internet port, 2.4GHz Radio, 5GHz Radio, Guest Port, LAN Ports x4
Antennas Type/Beam width	Integrated 360° 1.5dBi for 2.4GHz Radio Integrated 360° 2dBi for 5GHz Radio
Maximum Radio Tx Power	19 dBm @ 2.4 GHz 22 dBm @ 5 GHz
Wireless Chips	QCA9531 (2.4GHz 802.11b/g/n) QCA9887 (5GHz 802.11a/n/ac)
Operating Temperature (°C)	-20 to +60
Input Voltage	24V 1.2A
PoE Output Voltage	24V 0.5A via Guest Port
Dimensions (mm)	286x165x46
Weight (g)	850
Certifications	CE/RED, FCC, ROHS

Model WAC52G/WAC52G+

Ethernet Interfaces	1x GbE WAN/Internet, 4x LAN Fast Ethernet, 1x GbE Guest Port
Wireless Interfaces	Dual Chain 2.4GHz 802.11b/g/n Dual Chain 5GHz 802.11a/n/ac Wave-2
Concurrent Active Guests	200 - WAC52G Model 500 - WAC52G+ Model
Buttons	Power On/Off, Factory Reset 2.4GHz Radio, 5GHz Radio
Maximum supported WAN Throughput	1 Gbps
LEDs	Logo, Corner RGB-Multicolor, Power, WAN/Internet port, 2.4GHz Radio, 5GHz Radio, Guest Port, LAN Ports x4
Antennas Type/Beam width	Integrated 360° 2.5dBi for 2.4GHz Radio Integrated 360° 2.5dBi for 5GHz Radio
Maximum Radio Tx Power	19 dBm @ 2.4 GHz 22 dBm @ 5 GHz
Wireless Chips	IPQ-4018 Wave-2 5GHz 802.11ac & 2.4GHz 802.11b/g/n
Operating Temperature (°C)	-20 to +60
Input Voltage	24V 0.8A
Dimensions (mm)	286x165x46
Weight (g)	950
Certifications	CE/RED, FCC, ROHS

Industry Canada

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Interference Statement Federal Communications Commission

This equipment has been assembled by tested components which found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Complete system has not been tested.

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.

Separate collection

This product is designed for separate collection at an appropriate collection point. Do not dispose of as household waste.

For indoor use only

This product is designed for indoor usage only. Outdoor usage is not recommended.

Support

www.wavertech.eu/support

Downloads

www.wavertech.eu/downloads



Quick Start Guide
WAVER SMARTONE

WAC52N/WAC52N+
WAC52G/WAC52G+

www.wavertech.eu