



# QUICK START GUIDE

READ CAREFULLY BEFORE USING THE DEVICE

## DUAL - WAN HOTSPOT GATEWAY



CONTROLX | CTRX - 110

# Package Contents

1. Waver® ControlX Hotspot Gateway
2. 2x IEC Power Cords
3. Rack Ears + Screw kit
4. Quick Start Guide

# Requirements

- OS: Microsoft 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 ControlX in the upcoming software updates at [features@wavertech.eu](mailto:features@wavertech.eu)**

- Read this manual thoroughly before using Waver ControlX Hotspot Gateway
- 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

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# Package Contents



Waver® ControlIX Hotspot Gateway



2x IEC Power cords



Quick Start Guide

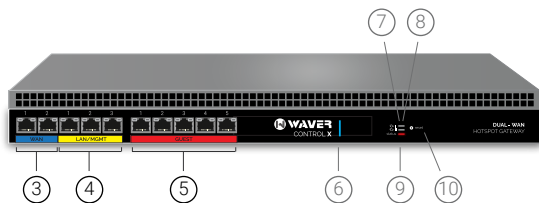


Rack Ears + Screw kit

# Safety Information

- Do not cover side ventilation holes
- This product must be operated far from any heater or heating vent
- Avoid direct irradiation of any strong light (such as sunlight)
- Operating Temperature: - 30 - 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

# Hardware Overview



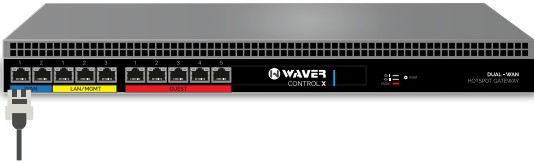
- |                          |                  |
|--------------------------|------------------|
| 1. Power 1 Socket (PSU1) | 6. Power LED     |
| 2. Power 2 Socket (PSU2) | 7. PSU1 LED      |
| 3. 2x WAN GbE Ports      | 8. PSU2 LED      |
| 4. 3x LAN/MGMT GbE Ports | 9. Status LED    |
| 5. 5x Guest GbE Ports    | 10. Reset Button |



# Hardware Installation

To install Waver ControlX, perform the following steps:

1. Connect Ethernet cable from your provider's router to WAN1 Port of Waver ControlX.



2. Connect both IEC plugs to "Power 1" and "Power 2" sockets. *You can use also a single socket, however we recommend using both for redundancy.*



Boot process will start as soon as you will connect the AC power. After a while (approx 2 mins) the STATUS led will blink three times and will remain on. The device now is ready to use.



The unit can be installed in a flat surface, or using the Rack Ears in a standard Rack.



## IMPORTANT

### NEVER DISCONNECT POWER

- During the boot process (it takes about 2 minutes for a complete boot up)
- During Reboot process
- During Factory Reset process
- During Firmware update process

- Disconnecting power 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 (STATUS led is constantly ON).

## Device Management

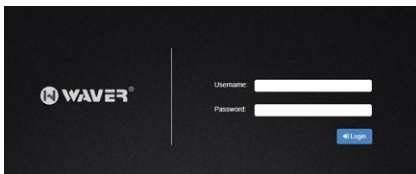
Device can be managed via any web browser. Access to the web interface is available from LAN/MGMT ports (local network) and WAN ports (internet).

### Web Management tools

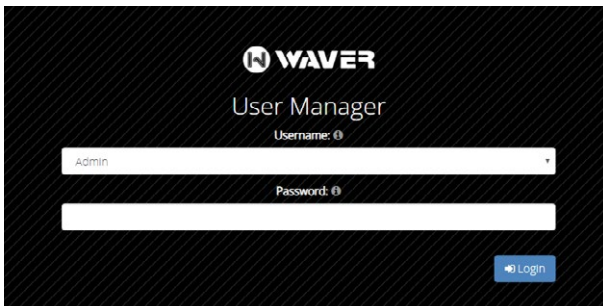
#### 1. Administration Interface

Default access:  
http://192.168.10.1

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



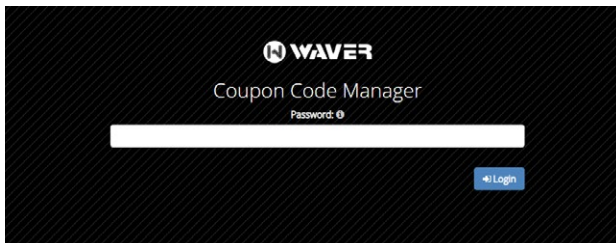
## 2. User manager Interface



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)

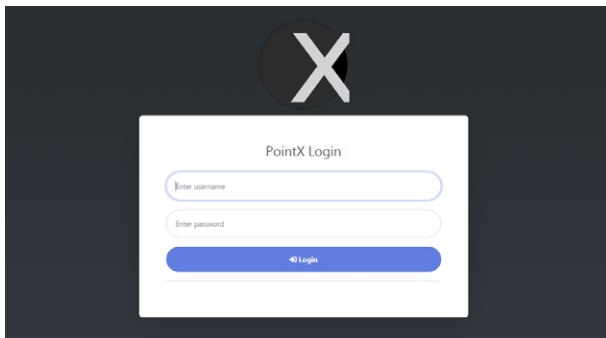
## 3. Discount Coupon Code manager



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



## 4. PointX CM (Centralized Management)



Default access: <http://192.168.10.1/pointx/>

Default Admin account

Username: **admin**

Password: **admin**

## 5. 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

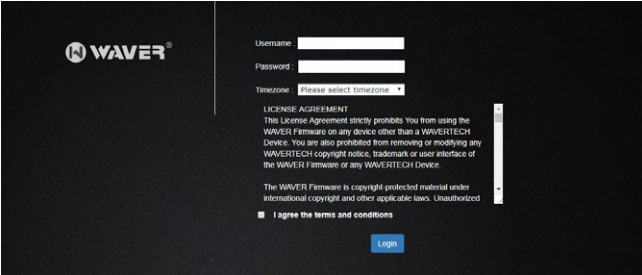
The main administration interface. Networking, guest session, captive portal settings, customization and management for the local device. General system settings and statistics are also available here.

1. To login to the the Administration interface connect with an Ethernet cable to any LAN/MGMT port.

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 login page for the Waver Administration Interface. On the left is the Waver logo. On the right, there are three input fields: 'Username', 'Password', and 'Timezone' (with a dropdown arrow). Below these is a 'LICENSE AGREEMENT' section with a scroll bar on the right. The license text states that the user is prohibited from using the Waver Firmware on any device other than a WaverTech Device and from removing or modifying any copyright notice, trademark, or user interface. At the bottom, there is a checkbox for 'I agree the terms and conditions' and a blue '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 the administration interface will appear. You are logged in and you can configure your Waver ControlX Hotspot gateway.

## An overview on the administration interface

The screenshot displays the Waver ControlX administration interface. At the top, there is a navigation bar with the Waver ControlX logo and several utility icons. Below the navigation bar, there are five main status cards: Free Users (0), Users (0), Email Users (0), Mobile Users (0), and Facebook Users (0). The main content area is divided into three sections: System, THROUGHPUT, and CONNECTIVITY. The System section provides detailed information about the device, including its name (CTX-110), uptime (27h0s), system time (06:50:21pm), system date (07/02/2020), and various status indicators for FQDN, IP, CPU, and Board temperatures. It also lists active guests and WAN status. The THROUGHPUT section features two line graphs showing traffic volume over time for WAN and LAN. The CONNECTIVITY section shows a diagram of the WAN 1 interface with its IP address (192.168.1.1) and MAC address (E2:80:81:14:00:00).

**System**

- Name: CTX-110
- Uptime: 27h0s
- System Time: 06:50:21pm
- System Date: 07/02/2020
- FQDN: State: Connected
- FQDN: State: Connected
- IP: Used: 14.20h
- CPU Temp: 50°C
- Board Temp: 50°C
- Active Guests: 0
- Guests Log: SR: 5:0:0 f
- IPsec Sync: 0:0:0 f

**WAN Status**

- Connection Type: Dual - Load Balance
- WAN1 Port: Connected
- WAN1 Port MAC: 88:69:F4:06:8C:1B
- WAN2 Port: Connected
- WAN2 Port MAC: 88:69:F4:06:8C:1C

**LAN Ports**

- Connected Port #1: ---
- LAN1 Port MAC: 88:69:F4:06:8C:1D
- LAN2 Port MAC: 88:69:F4:06:8C:1E
- LAN3 Port MAC: 88:69:F4:06:8C:1F

**Guest Rights**

- Connected Port #1: A, S
- Guest1 Port MAC: 88:69:F4:06:8C:20
- Guest2 Port MAC: 88:69:F4:06:8C:21
- Guest3 Port MAC: 88:69:F4:06:8C:22
- Guest4 Port MAC: 88:69:F4:06:8C:23

**THROUGHPUT**

WAN 1

LAN

CONNECTIVITY

**WAN 1**

- State: Connected - up (up)
- IP: 192.168.1.1
- MAC: E2:80:81:14:00:00

CONTROLX CTX-110  
Administration Interface

© Copyright 2020 WaverX Limited

## WAN | LAN

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

The screenshot displays the Waver ControlX Administration Interface. At the top left is the Waver ControlX logo. The top right corner features a user profile icon with '0' next to it, a circular progress indicator showing '0%', and a 'Logout' button. Below the logo is a navigation bar with tabs: MAIN, WAN | LAN (selected), GUEST NETWORK, CAPTIVE PORTAL, USERS | STATISTICS, BROADCAST COUPONS, and SYSTEM. Underneath this is a sub-navigation bar with tabs: WAN CONFIGURATION (selected), DNS ACCESS, FIREWALL MODULE, URL FILTERING, LAN IP SETTINGS, LAN ETHERNET, and LAN DHCP LEASES. The main content area is titled 'WAN CONFIGURATION' and features a cloud icon with a gear. The configuration form is titled 'WAN Connection Type' and has a dropdown menu set to 'Dual WAN - Load Balance (Static IP Address)'. Below this, there are two columns for 'WAN 1' and 'WAN 2'. Each column has input fields for IP Address, Subnet Mask, and Default Gateway. WAN 1 values are 192.168.33.247, 255.255.255.0, and 192.168.33.1. WAN 2 values are 192.168.200.136, 255.255.255.0, and 192.168.200.2. There is a 'Bandwidth distribution' slider set to 50/50. Below that are fields for Primary DNS (8.8.8.8) and Secondary DNS (8.8.4.4). A 'Save' button is at the bottom right of the form. A footer note states: 'Connection types supported using a single Internet connection via WAN1 port are Dynamic IP, Static IP and PPPoE Client. Dual-WAN mode supports load balancing between two Internet connections in order to increase overall network capacity, or auto-switching to a backup line in case of primary connection failure.' The bottom of the page has a dark footer with 'CONTROLX CTRX-110 Administration Interface', a logo, and '© Copyright 2020 WaverTech Limited'.

**WAN CONFIGURATION**

**WAN Connection Type**

Dual WAN - Load Balance (Static IP Address)

WAN 1	WAN 2
IP Address: 192.168.33.247	IP Address: 192.168.200.136
Subnet Mask: 255.255.255.0	Subnet Mask: 255.255.255.0
Default Gateway: 192.168.33.1	Default Gateway: 192.168.200.2

Bandwidth distribution: 50/50

Primary DNS: 8.8.8.8

Secondary DNS: 8.8.4.4

**Save**

Connection types supported using a single Internet connection via WAN1 port are Dynamic IP, Static IP and PPPoE Client. Dual-WAN mode supports load balancing between two Internet connections in order to increase overall network capacity, or auto-switching to a backup line in case of primary connection failure.

CONTROLX CTRX-110  
Administration Interface

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## 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 ControlX Administration Interface. The interface includes a top navigation bar with the Waver ControlX logo, user statistics (0 users, 0 sessions, 0% usage), and a 'Logout' button. Below the navigation bar, the 'GUEST NETWORK' section is active, showing sub-sections for 'GUEST SESSION', 'ACTIVE GUESTS', 'GUESTS GRAPH', 'GUEST IP SETTINGS', 'GUEST ETHERNET', 'GUEST DHCP LEASES', 'NETWORK HOSTS', '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 sliders for 'Network Maximum Download Speed (k)' set at 1830 Mbps and 'Network Maximum Upload Speed (k)' set at 770 Mbps. A 'Save' button is present. Below 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 a '+ Guest Session Limits (Free, Facebook, Email, Mobile)' section and a '- Session Settings' section. The 'Session Keepalive (All Guests) (h)' is set at 3 Hours, and 'Remember Login Credentials (Username Guests) (d)' is set at 10 Days. A 'Save' button is present.

A footer note 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 limits per device, concurrently connected devices with the same username/password etc.'

At the bottom, the interface identifies itself as 'CONTROLX CTRX-110 Administration Interface' with a copyright notice: '© Copyright 2020 WaverTech Limited'.

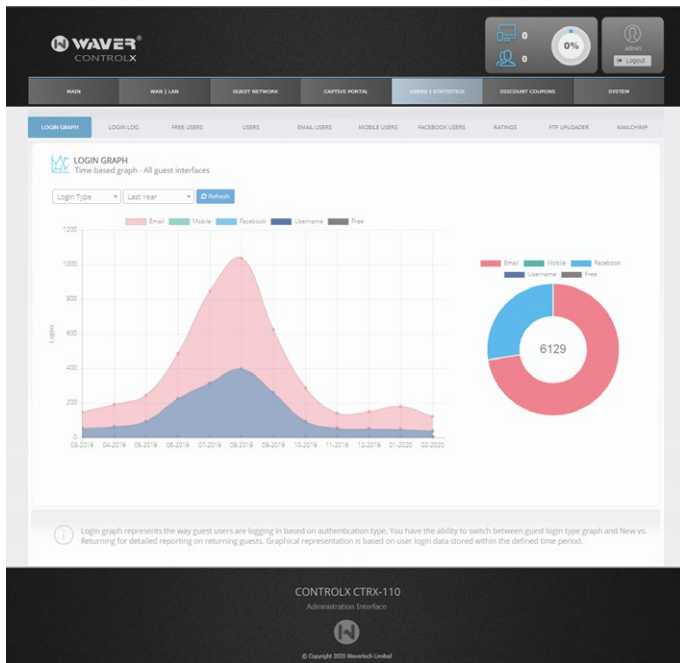
## CAPTIVE PORTAL

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

The screenshot displays the 'Waver CONTROLX' administration interface for a Captive Portal. The top navigation bar includes sections for MAIN, WAN | LAN, GUEST NETWORK, CAPTIVE PORTAL (selected), USERS | STATISTICS, DISCOUNT COUPONS, and SYSTEM. The CAPTIVE PORTAL section is further divided into sub-sections: 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. It is organized into three tabs: PAGE OPTIONS (selected), PAGE TEXTS, and COMPANY INFORMATION. The PAGE OPTIONS tab contains three columns of settings: PORTAL THEME (with a dropdown set to 'Grey'), VIDEO SETTINGS (including 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 (including 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 right of the settings area. On the right side, there is a preview of the captive portal page showing a photo placeholder 'Your Photo Here' and contact information under the heading 'Get in touch with us', including telephone (+1 23456789), fax (+1 23456789), and email (info@waver.tech) links. The footer of the interface identifies the device as 'CONTROLX CTRX-110 Administration Interface' and includes the Waver logo and copyright notice: '© Copyright 2015 WaverTech 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 shows the 'Waver ControlX' administration interface. At the top, there is a navigation bar with the Waver ControlX logo on the left and user statistics (0 users, 0% activity) and a login button on the right. Below the navigation bar, a menu contains 'MAIN', 'WAN | LAN', 'GUEST NETWORK', 'CAPTIVE PORTAL', 'USERS | STATISTICS', 'DISCOUNT COUPONS', and 'SYSTEM'. The 'DISCOUNT COUPONS' menu item is selected, leading to a page titled 'Coupons Add Coupon'. The page has two tabs: 'COUPON DETAILS' (selected) and 'EMAIL COUPON', 'SMS COUPON'. The main form area contains 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:** 2020-02-19
- COUPON SEND UNTIL:** 2020-03-19
- AMOUNT\***: 20
- CURRENCY:** Dollars
- VISIT COUNT TO SEND:** 5
- SEND COUPON:** After 48 hours
- COUPON VALIDITY PERIOD:**  CUSTOM DATES  DAYS AFTER RECEIVED
- COUPON VALID FROM:** 2020-02-19
- COUPON VALID UNTIL:** 2020-03-19

A green 'Save' button is located at the bottom right of the form. At the bottom of the interface, it says 'CONTROLX CTRX-110 Administration Interface' and '© Copyright 2020 Wavech Limited'.



## SYSTEM

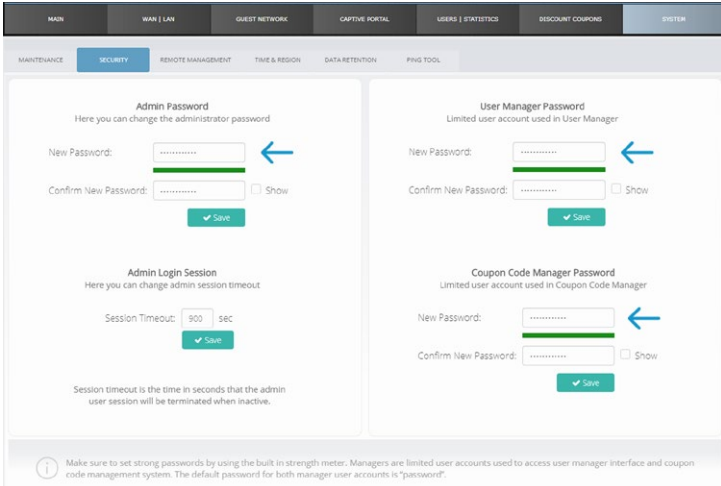
Gives you access to system settings, security, data retention and system timezone. Here you will find also firmware update and networking tools.

The screenshot displays the Waver ControlX Administration Interface. At the top left is the Waver ControlX logo. The top right contains status indicators for users (0), a progress circle at 0%, and a login button. A main navigation bar includes tabs for MAIN, WAN | LAN, GUEST NETWORK, CAPTIVE PORTAL, USERS | STATISTICS, DISCOUNT COUPONS, and SYSTEM. Below this is a secondary navigation bar with tabs for MAINTENANCE (selected), SECURITY, REMOTE MANAGEMENT, TIME & REGION, DATA RETENTION, and PING TOOL. The central content area features a 'Firmware Update' section with a 'Choose File' button (showing 'No file chosen') and an 'Update Firmware' button. Below this is a 'System reboot and reset' section with 'Reboot device' and 'Reset to default' buttons. A footer note advises users to always keep backups before updates or resets. The bottom of the interface shows 'CONTROLX CTRX-110 Administration Interface' and a copyright notice for 2025 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 sections for password management:

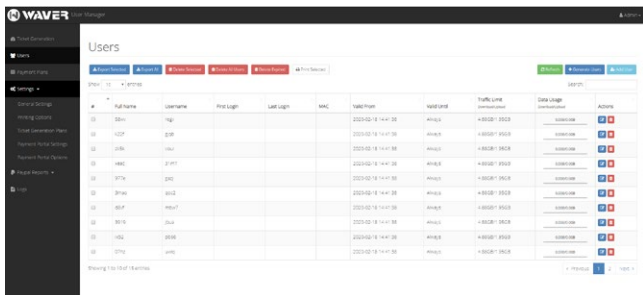
- Admin Password:** "Here you can change the administrator password." Fields for "New Password:" and "Confirm New Password:" with a "Show" checkbox and a "Save" button. A blue arrow points to the "New Password" field.
- Admin Login Session:** "Here you can change admin session timeout." A "Session Timeout:" field set to "900" with a "sec" unit and a "Save" button.
- 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.

At the bottom, an information icon and text state: "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.

## 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 left sidebar contains navigation options: Home Dashboard, Users, Payment Plans, Settings, Device Settings, Pricing Tables, User Location Filter, Payment Portal Settings, Payment Portal Options, Physical Access, and Help. The main content area is titled 'Users' and features a table with columns: #, Full Name, Username, First Login, Last Login, MAC, MAC Filter, MAC Filter, Traffic Limit, Data Usage, and Actions. The table lists 10 users with their respective details.

#	Full Name	Username	First Login	Last Login	MAC	MAC Filter	MAC Filter	Traffic Limit	Data Usage	Actions
10	John	john				2023-03-18 14:41:38	ALLOW	+50GB/1/50GB	50000000	[Edit] [Delete]
11	John	john				2023-03-18 14:41:38	ALLOW	+50GB/1/50GB	50000000	[Edit] [Delete]
12	John	john				2023-03-18 14:41:38	ALLOW	+50GB/1/50GB	50000000	[Edit] [Delete]
13	John	john				2023-03-18 14:41:38	ALLOW	+50GB/1/50GB	50000000	[Edit] [Delete]
14	John	john				2023-03-18 14:41:38	ALLOW	+50GB/1/50GB	50000000	[Edit] [Delete]
15	John	john				2023-03-18 14:41:38	ALLOW	+50GB/1/50GB	50000000	[Edit] [Delete]
16	John	john				2023-03-18 14:41:38	ALLOW	+50GB/1/50GB	50000000	[Edit] [Delete]
17	John	john				2023-03-18 14:41:38	ALLOW	+50GB/1/50GB	50000000	[Edit] [Delete]
18	John	john				2023-03-18 14:41:38	ALLOW	+50GB/1/50GB	50000000	[Edit] [Delete]
19	John	john				2023-03-18 14:41:38	ALLOW	+50GB/1/50GB	50000000	[Edit] [Delete]



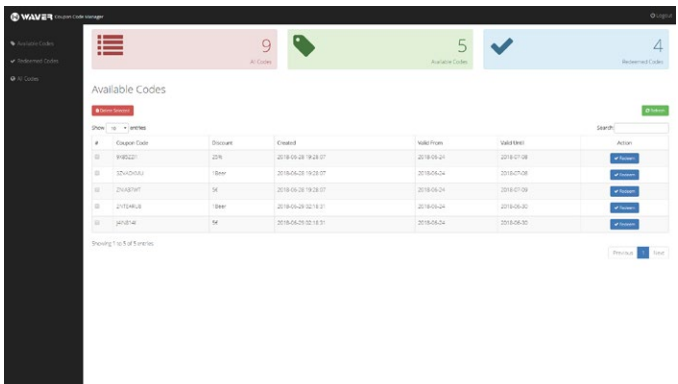
### API Access

User/pass management via HTTP API

### 3. Discount Coupon Codes Manager

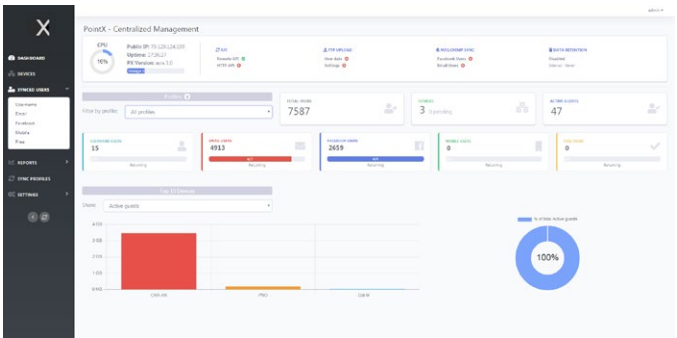
A mobile friendly coupon code manager tool for use by employees to check coupon code validity and redeem the active ones.

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



# 4. PointX Centralized Management

PointX is a private-cloud platform which allows centralized management of remote Waver devices. A great tool designed for service providers, retailers or chain-stores who need centralized configuration, user data management, reporting and captive portal customization for multiple devices/locations all in one place.



- Encrypted Communication



- Unlimited Waver Devices and sync profiles



- Management users with custom roles and privileges



- HTTP API for user data sharing with third-party platforms

## 5. 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

Choose file Browse



User Manager logo  
PNG Only - Recommended 172x40px

Choose file Browse



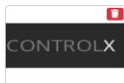
Coupon Manager logo  
PNG Only - Recommended 172x42px

Choose file Browse



Admin Interface Main logo  
PNG Only - Recommended 183x33px

Choose file Browse



Admin Interface Secondary logo  
PNG Only - Recommended 131x23px

Choose file Browse

**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

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Please contact [sales@wavertech.eu](mailto: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 in front of device

Using a tool, hold and press the reset button. After 2 seconds, the STATUS led will start blinking. Keep pressing the button for 10 seconds and release. The status led will continue to blink after release. The factory reset procedure has started.

# 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 použití:

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 strømadapteren 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 utasítás:

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 webbrower om het product te configureren. Meer informatie in <https://www.wavertech.eu/downloads>

PL. Instrukcja obsługi:

Podłącz adapter zasilania, aby włączyć urządzenie. Otworz 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 intr-un browser web pentru a configura produsul. Mai multe informații in <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 pa <https://www.wavertech.eu/downloads>

NO. Bruksanvisningen:

Koble strømadapteren for a slä pa enheten. Apne 192.168.10.1 i en nettleser for a konfigurere produktet. Mer informasjon pa <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 CONTROLX CTRX-110 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

[BG] Bulgarian

С настоящето, WEVERTECH декларира, че WEVER CONTROLX CTRX-110 е в съответствие със съществените изисквания и другите приложими разпоредби на Директива 2014/53/EU.

[CZ] Czech

WEVERTECH tímto prohlašuje, že WEVER CONTROLX CTRX-110 splňuje základní požadavky a všechna příslušná ustanovení Směrnice 2014/53/EU.

[DK] Danish

Undertegnede WEVERTECH erklærer herved, at følgende udstyr WEVER CONTROLX CTRX-110 overholder de væsentlige krav og øvrige relevante krav i direktiv 2014/53/EU.

[DE] German

Hiermit erklärt WEVERTECH dass sich das Gerät WEVER CONTROLX CTRX-110 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 2014/53/EU befindet.

[EE] Estonian

Kaesolevaga kinnitab WEVERTECH seadme WEVER CONTROLX CTRX-110 vastavust direktiivi 2014/53/EU pohinouetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

[GR] Greek

ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Ο ΚΑΤΑΣΚΕΥΑΣΤΗΣ WEVERTECH ΔΗΛΩΝΕΙ ΟΤΙ ΤΟ ΠΡΟΙΟΝ WEVER CONTROLX CTRX-110 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 CONTROLX CTRX-110 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 CONTROLX CTRX-110 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 2014/53/EU.

[LV] Latvian

Ar šo WEVERTECH deklarē, ka WEVER CONTROLX CTRX-110 atbilst Direktīvas 2014/53/EU būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

[LT] Lithuanian

Šiuo WEVERTECH deklaruoja, kad šis WEVER CONTROLX CTRX-110 atitinka esminius reikalavimus ir kitas 2014/53/EU Direktyvos nuostatas.

[HU] Hungarian

A WEVERTECH ezzennel kijelenti, hogy a WEVER CONTROLX CTRX-110 típusu berendezés teljesíti az alápvető követelményeket és más 2014/53/EU irányelvben meghatározott vonatkozó rendelkezéseket.

[NL] Dutch

Hierbij verklaart WEVERTECH dat het toestel I WEVER CONTROLX CTRX-110 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 2014/53/EU.

[PL] Polish

Niniejszym WEVERTECH deklaruje że WEVER CONTROLX CTRX-110 jest zgodny z zasadniczymi wymaganiami i innymi właściwymi postanowieniami Dyrektywy 2014/53/EU.

[PT] Portuguese

Eu, WEVERTECH declaro que o WEVER CONTROLX CTRX-110 cumpre os requisitos essenciais e outras provisões relevantes da Directiva 2014/53/EU.

[RO] Romanian

Prin prezenta, WEVERTECH declară că aparatul WEVER CONTROLX CTRX-110 este în conformitate cu cerințele esențiale și cu alte prevederi pertinente ale Directivei 2014/53/EU.

[SK] Slovak  
WAVERTECH týmto vyhlasuje, že WAYER CONTROLX CTRX-110 spĺňa základne požiadavky a všetky príslušne ustanovenia Smernice 2014/53/EU.

[SI] Slovenian  
WAVERTECH izjavlja, da je ta WAYER CONTROLX CTRX-110 v skladu z bistvenimi zahtevami in drugimi relevantnimi določili direktive 2014/53/EU.

[FI] Finish  
WAVERTECH vakuuttaa taten etta WAYER CONTROLX CTRX-110 tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sita koskevien direktiivin muiden ehtojen mukainen.

[SE] Swedish  
Harmed intygar WAVERTECH att denna WAYER CONTROLX CTRX-110 är i överensstammelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 2014/53/EU.

[NO] Norwegian  
WAVERTECH Erklærer herved at WAYER CONTROLX CTRX-110 er i samsvar med de grunnleggende krav og øvrige 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 CTRX-110

Boards	1x Network board 1x System board (SBC)
CPU 1 - Network board	Annapurna Alpine AL21400 CPU 4xCortex A15 cores clocked at 1.4GHz each
CPU 2 - System board (SBC)	Broadcom BCM2711 CPU 4xCortex A72 cores 64-bit clocked at 1.5GHz each
10/100/1000 Ethernet ports	2x WAN Ports 3x LAN/MGMT Ports 5x GUEST Ports
Maximum supported WAN Throughput	2Gbps
Concurrent Active Guest users	Unlimited
LEDs	Power, Status, PSU1, PSU2, Ethernet Port Operation



Buttons	1x Reset button (Factory reset and TFTP Recovery)
Max power consumption	25 W
Power Supply units No.	2
Number of AC inputs	2
AC Input Range	100-240 Volts
Tested working ambient temperature	-30°C to 60°C
Dimensions	444 x 152 x 45 mm
Installation	Rack Mountable or Flat surface
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](http://www.wavertech.eu/support)

# Downloads

[www.wavertech.eu/downloads](http://www.wavertech.eu/downloads)



**Quick Start Guide**  
WAVER CONTROLX CTRX - 110

[www.wavertech.eu](http://www.wavertech.eu)