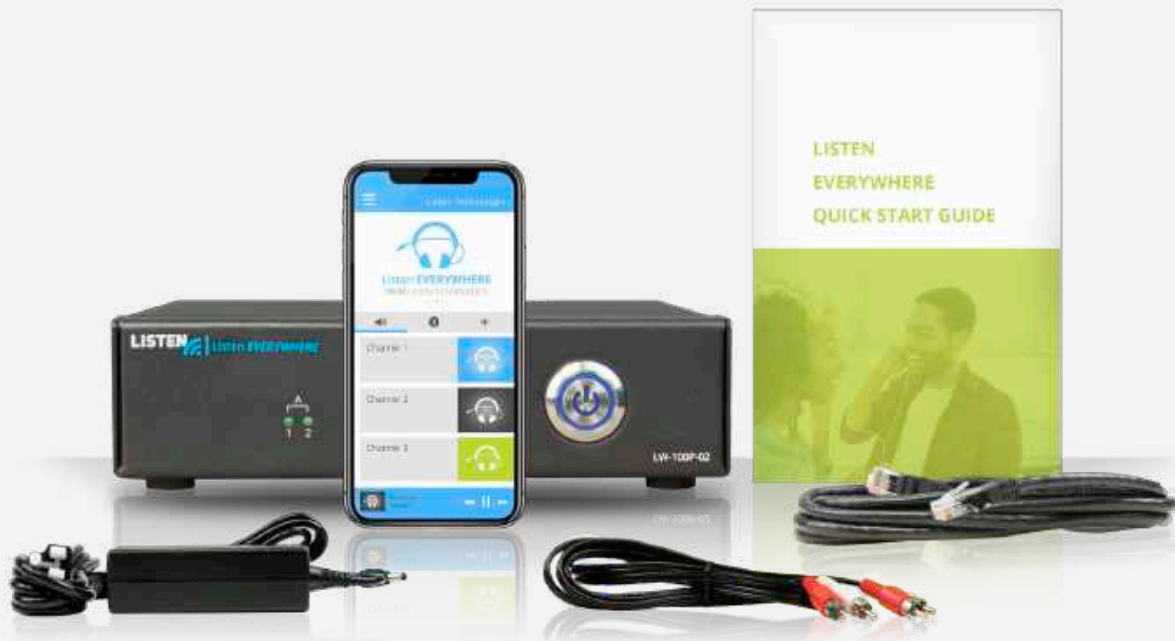


Listen **EVERYWHERE**



Server Admin Interface

ENGLISH MANUAL

www.ListenEVERYWHERE.com

LISTEN
TECHNOLOGIES 
www.listentech.com

INTRODUCTION

The Server Administration Interface is a web application, hosted in firmware by a Listen EVERYWHERE Venue Server, that enables network administrators to manage the Venue Server's network configuration.

The Server Admin Interface can be accessed from common Windows PC or Apple browsers such as Microsoft Edge, Mozilla Firefox, Google Chrome, Opera or Apple Safari or from most mobile device browsers.

SERVER ADMIN FUNCTIONS

The Listen EVERYWHERE Venue Server is by default configured as a DHCP client, which means that it will receive an IP address, subnet mask, gateway, domain name server (DNS) address, and other pertinent configuration parameters from the network it is plugged into. This default network configuration will be suitable for most networks. However, if it is desired to configure the IPv4 network configuration to adapt the Venue Server to the local network, the Server Admin Interface can be used to specify a static IP address, subnet mask, gateway, or DNS name server(s).

The Server Admin Interface also allows the Venue Server to be configured for DHCP server capabilities. This is useful in scenarios where a stand-alone network is being created specifically for the purpose of streaming audio, where an existing router and networked DHCP server is not available. When configured to be a DHCP server, the Venue Server will assign out IP addresses and lease times to all connected devices.

Server Admin Interface allows the following network parameters to be configured:

- View/Edit Internet Protocol Version 4 (TCP/IPV4) configuration:
 - Automatic (DHCP) or Static IP addressing methods
 - IP Address
 - Netmask
 - Gateway
 - DNS Nameservers
- View/Edit Dynamic Host Control Protocol Version 4 (DHCPv4) configuration:
 - Enable/Disable DHCP Server
 - IP Address Start
 - IP Address Stop
 - Lease Time

STEP 1 Venue Server Setup

Set up the Listen EVERYWHERE Venue Server using the included instructions. Connect the Venue Server to the local area network to be used for Listen EVERYWHERE Wi-Fi audio streaming. Confirm the Venue Server's operation using a mobile device equipped with the Listen EVERYWHERE App. Write down the Server ID and Passcode located on the Venue Server's bottom panel.

For installation, network and Wi-Fi tips, refer to the Listen EVERYWHERE Network Configuration Tech Note.

<https://www.listentech.com/support/manuals/>



Figure 1: Venue Server Bottom Panel with Server ID and Passcode

STEP 2 Log In

There are two methods to log in to the Server Admin. Method 1 uses the Venue Server ID. Method 2 uses the Venue Server IP Address.

METHOD 1 Log In Using the Venue Server ID (preferred)

Using a computer or mobile device connected to the same network as the Venue Server, launch your chosen web browser and type the following into the browser's address bar:

<http://<server id>.<domain>/admin>

<server id> is the Venue Server ID from the bottom panel, starting with "AEL" and including hyphens.
<domain> is the networks domain name, typically "local" or "localhost".

Omit the brackets < > but include the period/dot between server id and domain. Below is an example using the Server ID from Figure 1:

Example: <http://AEL6-XXXX-XXXX-XXXX.local/admin>

After a few moments, the Venue Server will respond with the Login Screen (Figure 2A).
Enter "admin" as the User Name and the Venue Server's Passcode as the Passcode (Figure 2B).

METHOD 2 Log In Using the Venue Server IP Address

By default, the Venue Server requests an IP address from the network DHCP server. To locate this IP address, login to the router or other DHCP server on your network and browse for the Venue Server by looking for its Server ID and Hostname beginning with "AEL".

Alternatively, use a network scanning tool to discover the IP Address. The Venue Server will appear by its Server ID/Hostname beginning with "AEL" and with a MAC vendor of WIBRAIN. Here are some examples of network scanning tools that can be used to identify the IP Address:

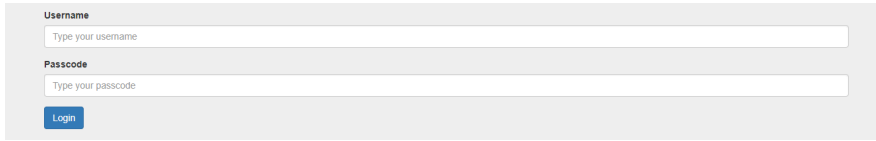
- Net Analyzer (Android or iOS)
- Fing (Android or iOS)
- Advanced IP Scanner (Windows)
- Bonjour (macOS)
- Avahi (Linux OS)

Once the Venue Server's IP address has been identified, using a computer or mobile device connected to the same network as the Venue Server, type the following into your favorite web browser address bar (omit the < > brackets):

http://<Venue_Server_IP>/admin

Example: <http://192.168.1.110/admin>

After a few moments, the Venue Server will respond with the Login Screen (Figure 2A).
Enter "admin" as the User Name and the Venue Server's Passcode as the Passcode (Figure 2B).

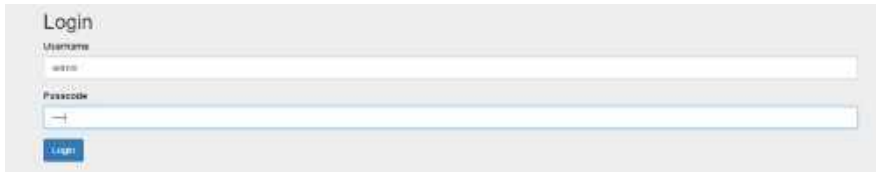


Username
Type your username

Passcode
Type your passcode

Login

Figure 2A: Server Admin Login Screen



Login

Username
admin

Passcode
[Passcode]

Login

Figure 2B: Enter “admin” as the User Name and enter the Venue Server’s Passcode as the Passcode.

STEP 3 View Network Configuration

The “Welcome” screen (Figure 3A) appears after a successful log in. Click “Network Connections” to view the current Venue Server network configuration (Figure 3B). Click “Home” at any time to return to the Welcome screen.

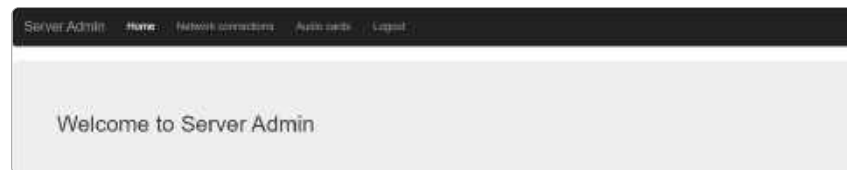


Figure 3A: Server Admin Welcome Screen



Actions	Device id	Hardware address	IPv4 address	Netmask	Gateway	DNS name servers
Edit IPv4 configuration Edit DHCPv4 server configuration	eth0-ipv4	80:1E:06:36:7B:37	192.168.1.110	255.255.255.0	192.168.1.1	192.168.1.1

Figure 3B: Network Connections Screen

The Network Connections screen displays the following information (Figure 3B):

- **Device ID:** The first section represents the ethernet interface port number on the Listen EVERYWHERE server (ethernet port 0), with the second section showing Internet Protocol Version 4 (ipv4) being used. The Device ID is read only, not configurable.
- **Hardware Address:** The Venue Server’s unique Ethernet/MAC Address, which cannot be changed. Also printed on the bottom of the server.
- **IPv4 Address:** The Venue Server’s current IP address, typically assigned by the DHCP server on the network. IPv4 can be changed by clicking on “Edit IPv4 configuration”.
- **Netmask:** The Venue Server’s current Netmask, typically assigned by the DHCP server on the network and used to create and manage the network. Netmask can be changed by clicking on “Edit IPv4 configuration”
- **Gateway:** IP address and central node for all traffic going to another network, including traffic destined for the internet. Typically assigned by the DHCP server on the network. Gateway can be changed by clicking on “Edit IPv4 configuration”.
- **DNS Name Servers:** IP address(es) of DNS Name servers used to convert a domain name to an internet IP address. Typically assigned by the DHCP server on the network but can be changed by clicking on “Edit IPv4 configuration”.

STEP 4 Edit Network Configuration

To configure IPv4 settings for the local network, simply click the blue “Edit IPv4 Configuration” button on the left side of the screen. The Server Admin Interface will open a network configuration page (Figure 4).



Figure 4: Edit Network Connections Screen

To edit the Venue Server’s IP Address, Netmask, Gateway, and DNS Nameservers, the “Method” dropdown will need to be changed to “Static”. This will allow the fields to be edited.

- **Address:** Enter a static IPv4 network IP address in this box.
- **Netmask:** Enter the IPv4 netmask of the Listen EVERYWHERE network.
- **Gateway:** Enter the IP address that allows the Venue Server to access the internet. Internet access will allow the Venue Server to be customized via Listen EVERYWHERE Cloud Services.
- **DNS Nameservers:** Enter the IP address of the DNS Name Server(s) you wish to use, clicking on the blue add button to add new DNS Name Server(s). An existing DNS nameserver can be removed by clicking the blue minus button.

Click the blue “Save” button at the bottom left of the screen to save any changes to the Venue Server. You will be alerted that the application will be closed (Figure 5), and you will lose access to the Server Admin Interface as the network configuration is implemented.

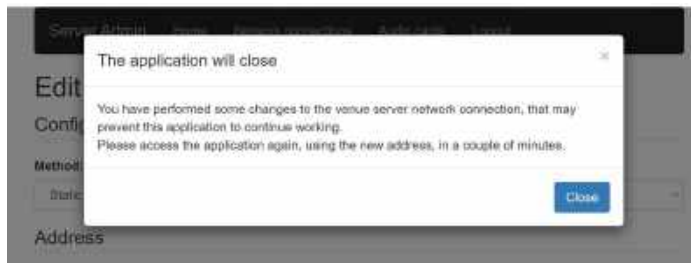


Figure 5

If the network configuration of the server is modified outside of the current subnet, you will need to connect the server to the intended subnet for any further configuration and use.

If the Server Admin was accessed by its IP address (step 2, method 2), you will need to use the new IP address to login again. If it was accessed by its Server ID (step 2, method 1), you can simply refresh the page to login again.

Please note the blue Front Panel LED can indicate certain server and network conditions. Refer to Figure 10 for details.

DHCP SERVER CONFIGURATION

The Listen EVERYWHERE server can be configured to provide DHCP services. This is useful in scenarios where a stand-alone network is being created for Listen EVERYWHERE, where an existing DHCP server is not available. When configured to be a DHCP server, the Venue Server will assign out IP addresses and lease times to all connected devices. It is important to note that when using the Listen EVERYWHERE server for DHCP services, the Venue Server will not have internet access, and neither will the connected devices. If you desire to have internet access on your stand-alone network, it is recommended to provide a router with DHCP services enabled.

To enable DHCP services:

Under Network connections Interface, click on the blue “Edit DHCPv4 Server Configuration” button on the left side of the screen. The Server Admin interface will now allow you to enable DHCP services (Figure 6).



Figure 6

Click on the blue “Enable Service” button. A message will pop up indicating that the DHCP service state will be enabled, and a default configuration will be applied (Figure 7).

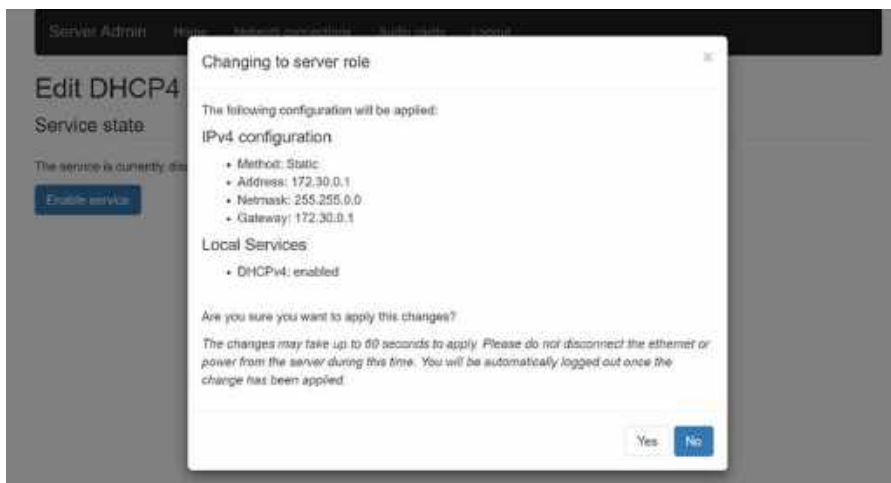


Figure 7

After clicking Yes, you will be disconnected from the Server Admin Interface. The Listen EVERYWHERE server will now need be connected to the network where it will be providing DHCP services. To configure further, you will need to reconnect your computer or mobile device to this new network and reconnect to the Server Admin Interface. It is also possible to plug the server directly into your computer using a Ethernet cable allowing the server to assign your computer an IP address, and connecting in your browser via the Server ID or the servers new IP address (172.30.0.1 default). Once reconnected, you can now edit parameters for the DHCP server (Figure 8).

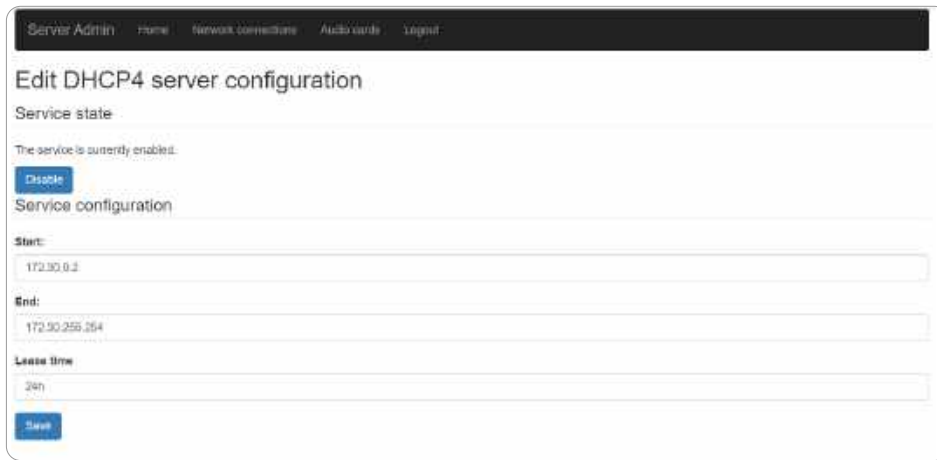


Figure 8

The Start and Stop IP addresses must be within the 172.30.0.0/16 subnet, as the gateway is set to 172.30.0.1.

Start: Default 172.30.0.2. This specifies the start of the IP address range the server will assign.

Stop: Default 172.30.255.254. This specifies the end of the IP address range that the server will assign.

Lease Time: Default 24 hours. This is the lease time duration for each client. This can be specified in seconds(s), minutes(m), or hours(h).

Click the blue “Save” button at the bottom left of the screen to save any changes to the Venue Server.

Please note the blue Front Panel LED can indicate certain server and network conditions. Refer to Figure 10 for details.

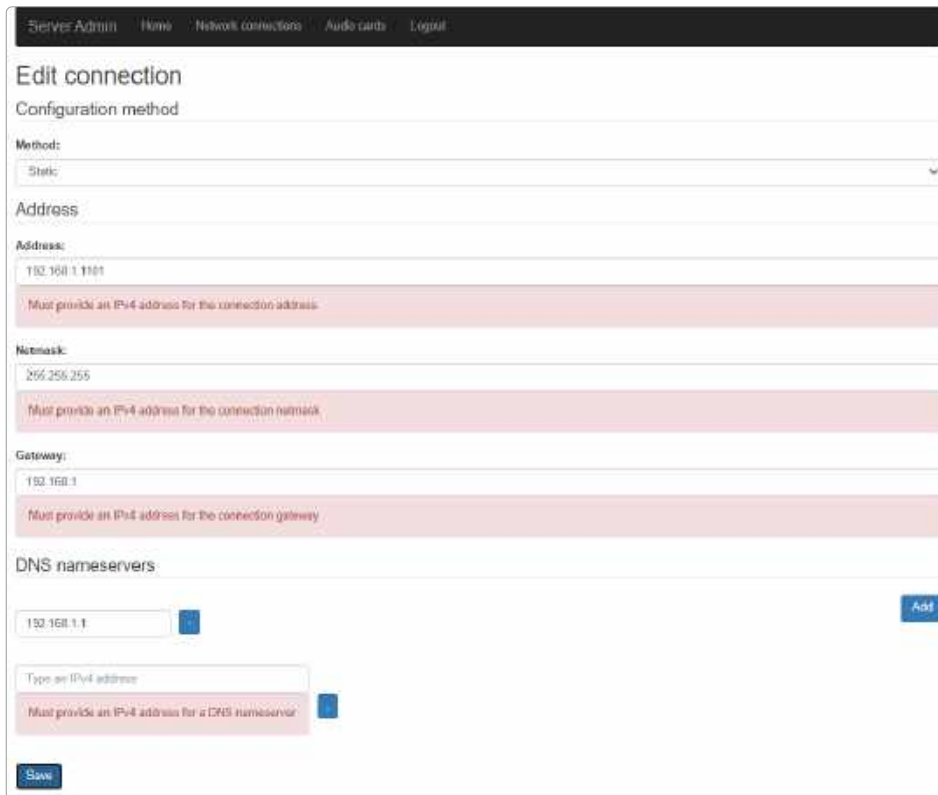
STEP 5 LOGGING OFF THE SERVER ADMIN INTERFACE

Once you have configured your Venue Server click the Logout menu choice at the top of the screen.

POTENTIAL ERRORS AND RECOVERY

The Server Admin Interface will catch common errors with improper IPv4 addresses during configuration and alert the user to the error (Figure 9). Error messages will disappear when corrections have been made.

It is important to note that not all network configuration errors can be caught. Some errors, such as IP address conflicts on the network, will occur after the configuration is saved and the server is rebooted. When errors like this are encountered, the front panel LED status will flash in panic mode indicating the server has an improper network configuration and cannot communicate on the network. When this happens, the server will revert to a known working DHCP configuration after 5 minutes.



The screenshot shows the 'Edit connection' page in the Server Admin Interface. The page has a navigation bar at the top with links: 'Server Admin', 'Home', 'Network connections', 'Audio cards', and 'Logout'. The main content area is titled 'Edit connection' and 'Configuration method'. Under 'Configuration method', the 'Method' is set to 'Static'. The 'Address' field contains '192.168.1.1101' and has a red error message below it: 'Must provide an IPv4 address for the connection address'. The 'Netmask' field contains '255.255.255' and has a red error message below it: 'Must provide an IPv4 address for the connection netmask'. The 'Gateway' field contains '192.168.1' and has a red error message below it: 'Must provide an IPv4 address for the connection gateway'. The 'DNS nameservers' section has a field with '192.168.1.1' and a red error message below it: 'Must provide an IPv4 address for a DNS nameserver'. There is an 'Add' button next to the DNS field and a 'Save' button at the bottom left.

Figure 9:
Error Messages

FRONT PANEL LED STATUS

Your Listen EVERYWHERE server has a blue power LED on the front which has been programmed to blink at different intervals to indicate specific server and network conditions. This allows a quick glance at the server to determine its status. See Figure 10 below which shows the blink interval and the mode.

Figure 10

Interval	Mode	Detail
Blinks once per second	Initialization Mode	Indicates server is booting up or waiting for network connection
Solid LED	DHCP Client Mode (default)	Indicates server has a valid DHCP address
Blinks twice every 4 seconds	Static IP Mode	Indicates server has a valid Static IP address
Blinks once every 4 seconds	DHCP Server Mode	Indicates server is providing DHCP Services for the network
Blinks twice per second	Panic Mode	Indicates the server has an issue that needs to be addressed