





Important Note

This switch configuration example is intended to serve as a network setup guideline for systems using only Q-LAN audio streaming within your Q-SYS system and should be used alongside the Q-SYS Q-LAN Networking Overview tech note for deeper setup insight. Keep in mind that QSC is unable to provide live network configuration support for third-party switch configuration. To learn more about network switch qualification services and the plug-and-play Q-SYS NS Series preconfigured network switches, visit http://www.qsc.com/switches.

This document applies to these Vigitron switches: **Vi3026** | **Vi3010**

Introduction

As of release 5.3.x, Q-SYS Designer software now supports AES67-standard interoperability. The AES67 standard does not prescribe a method of discovery for devices so manufacturers are free to implement one or more discovery services for their devices. In this configuration document, the process uses Bonjour as the discovery method for AES67 devices.

Q-SYS Designer now also offers a selection of Differential Services Code Point (DSCP) setting presets to optimize Quality of Service (QoS) for different types of deployment. DSCP codes are a six-bit value placed in the IP header of data packet, and they instruct a network switch to handle various types of data with defined levels of priority that ensure proper QoS.

Configuring the switch

Preliminary setup

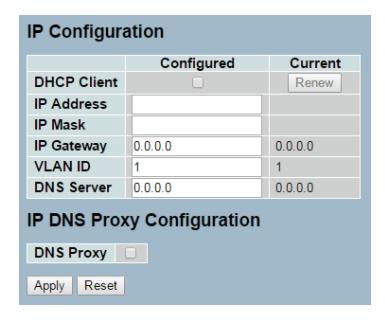
Connect the computer to the switch via a network cable. Also connect a serial cable between the computer's serial port and the switch's console port. Turn the switch on.

NOTE: The switch's factory default IP address is 192.168.1.1. Therefore, if your computer is connected to a network, you might need to use a second network interface card (NIC) for connecting to the switch. This is because many networks already use that IP address, typically for a router. If the computer is not connected to a network, you can connect it to the switch directly without an extra NIC.



Setting IP address and subnet mask

1. Open a browser and enter **192.168.1.1** in the address bar. The switch's web interface will appear. Log in using the username **admin** with no password.



- 2. Select System > IP.
- In IP Address and IP Mask, enter the intended IPv4 and IP subnet mask settings. IP Gateway, VLAN ID, and DNS Server settings are not needed for Q-LAN functionality.
- 4. Click Apply.
- 5. Enter the new IP address in the address bar of the browser and access the switch via the new IP address.

Setting frame size

- 6. In the left menu pane select Configuration > Port > Configuration. The list of ports and their configurations will appear.
- Determine which ports will be carrying Q-LAN traffic. Their maximum frame size will have to be set to 1536. (Ports used for other traffic, such as video cameras, may be set to other values, but be aware that Q-LAN traffic cannot share an uplink with traffic that uses jumbo [i.e., > 1536] frame sizes.)
- 8. Under the **Maximum Frame Size** column enter **1536** for any port which will transport Q-LAN traffic. You can copy and paste for repeated entries. If no devices connected to the switch need jumbo packets, you can simply enter **1536** in the top field (i.e., "Port *"), and it will enter that value in all the ports.
- 9. Click Apply.

Setting QoS

- 10. Select **QoS** in the left menu pane and then click Port Classification.
- 11. Select the top check box under DSCP Based. This will select all the check boxes in the column below as well.
- 12. Click Apply.
- 13. Select **QoS** in the left menu pane and then select **DSCP-Based QoS**. This is where the mapping of incoming DSCP-marked packets are assigned to priorities queues.







- 14. In the row for DSCP value 34, select **Trust** and then select **6** for QoS Value. This sets second-highest priority for the Q-LAN audio data packets.
- 15. In the row for DSCP value 46, select **Trust** and then select **7** for QoS Value. This sets highest priority for the Q-LAN clock data packets.
- 16. Click Apply.

Saving the settings

- 17. Select Maintenance in the left menu pane.
- 18. Select Save/Restore > Save Start. The switch will ask 'Are you sure to save the current setting as Start Configuration?'
- 19. Click Save.

The switch web interface will indicate that the settings have been saved successfully.

Making a configuration backup

20. To save a backup of the configuration settings, select **Maintenance > Export/Import > Export Config** and click **Save Configuration**.

NOTE: Should you ever need to restore this backup file into the switch, select **Maintenance > Export/Import > Import Config** and select the file to import.



















