STAC VIP

STAC VIP Quickstart Guide

The STAC VIP is a studio telephone interface device designed to work on VoIP telephone systems. This guide will give you the minimum you need to know to get the system hooked up and running. For more details on how to configure more complex arrangements, see the full user manual.

Requirements

To configure and start using the STAC VIP, you'll need the following information:

1. The user name, password, and server address of a cloud-based VoIP service, an available account on your PBX, or similar information in order to utilize STAC VIP on a gateway device.

2. An available static IP on your network, including gateway, netmask and DNS server information.

3. Knowledge of how the STAC VIP will be attached to your studio audio ports.

Steps

Here's a list of the steps that need to be accomplished to start using STAC VIP. We'll outline each in detail below:

1. Use the Comrex **Device Manager** utility or the **Console IP Setup Interface** to set static IP info into the STAC VIP.

2. Associate your VIP Control surface to your STAC VIP Mainframe.

3. Use **Device Manager** or a computer browser to set up the provider details (cloud provider, pbx) into the STAC VIP **Toolbox** interface.

4. Use the **Toolbox** interface to configure the STAC VIP "behavior" to set how the STAC VIP's audio I/O interacts with your studio.

STAC VIP Rear Panel

1) **Mains Power** - Apply universal mains power (110-240VAC) to the IEC connector here.

2) **ANALOG/AES3 Input Switch** - This switch determines whether the leftmost XLR connector is used for analog "send" audio to callers, or is configured as an AES3 digital audio input.

3) **SEND 1 INPUT** - In analog mode, this XLR connector should be sent a balanced, 0dBu signal that is heard by callers when they are "on-air". This is usually a "mix-minus" feed created on your studio console. In digital AES3 mode, both **SEND 1 INPUT** and **SEND 2 INPUT** are applied here (on left and right channel, respectively).

4) **SEND 2 INPUT** - Use of **SEND 2 INPUT** is optional. This analog input receives audio to be sent to callers on "hybrid 2" when "on-air".

5) **HOLD 1 INPUT** - Analog only, route audio to this port that will be sent to callers "on-hold".

6) **HOLD 2 INPUT** - This input is only used when in Split Studio Mode.

7) **CALLER 1 OUT** - This analog output will deliver the audio from callers who are sent to "hybrid 1" on air. Alternately, the system may be configured to present all caller audio on this single output.

8) **CALLER 2 OUT** - This analog output will deliver the audio from callers who are sent to "hybrid 2" on air.

9) **AES3 Out** - This digital output contains the audio from **CALLER 1 OUT** on the left side, and **CALLER 2 OUT** on the right.

10) **AUX OUT** - This output contains a selectable mix of **CALLER 1 OUT, CALLER 2 OUT** and **SEND** audio.

11) **USB (x2)** - Connect a keyboard and mouse to these ports to utilize the **Console IP Setup Interface**.

12) **Primary Ethernet Port** - Connect your network to this gigabit compatible Ethernet port.

13) **Secondary Ethernet Port** - Use allows for "split network" operation, assigning certain services to Primary or Secondary Ethernet port only. Disabled by default.

14) **Contact Closure Connector** - This contains 4 contact closure input and output signals.

15) **Serial Port** - This is an RS-232 connector that presents a serial port for future use.

16) **VGA** - Computer video port. Attach a monitor here for **Console IP Setup Interface**.

Step 1 - Static IP

STAC VIP is shipped from the factory set to DHCP mode, so it will find an address on your network if possible. The easiest way to find what that address is to use the Comrex **Device Manager** utility, available on our website for both Windows and Mac platforms.

Install **Device Manager** on a computer on the same physical LAN as the STAC VIP. Once installed and run, press the "**scan**" button in the upper left corner to scan your network for Comrex products.

Device Manager will allow you to set the IP information directly into STAC VIP during the first five minutes that STAC VIP is booted up. When a STAC VIP is located in the left list and selected, you can choose the **Web Configuration** option on the right side to set the IP parameters. But note the countdown clock, which will tell you when those initial five minutes are up.

Alternatively, you can attach a keyboard and mouse to the USB ports, and a VGA video monitor to the monitor port on the STAC VIP mainframe. [Note: STAC VIP may require a reboot once these are applied.] The **Network Settings Configuration Manager** will appear on the display and allow you to enter the settings information as shown below.
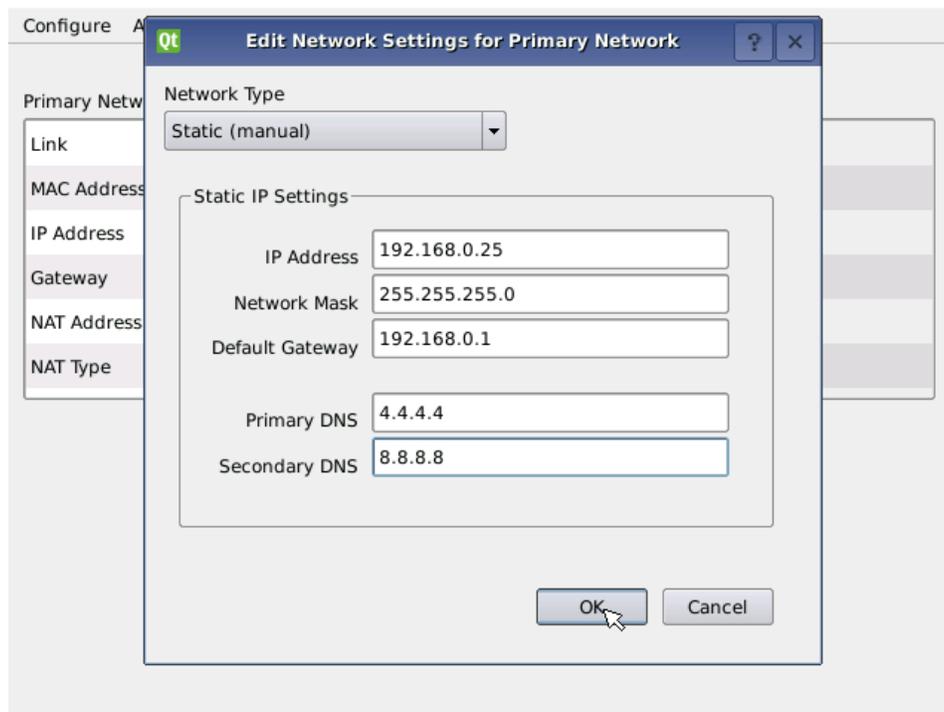
Configuration of your STAC VIP is done in the **Toolbox** interface, accessible either by the Comrex **Device Manager** utility (via the **Web Configuration** tab) or pointing a browser to **http://[ip_address of your STAC VIP]/cfg**. The default login credentials are **admin/comrex**.

Step 2 - Control Surface

To setup the control surface, connect the PoE device to your control surface and your network. Control surfaces must be attached to the same physical LAN as the mainframe. They must share an IP subnet. Routers between mainframe and control surfaces will cause malfunction.

Plugged into your VIP Control Surface

Plugged into your network

Power

PoE for Control Surface

Primary Ethernet plugged into your network
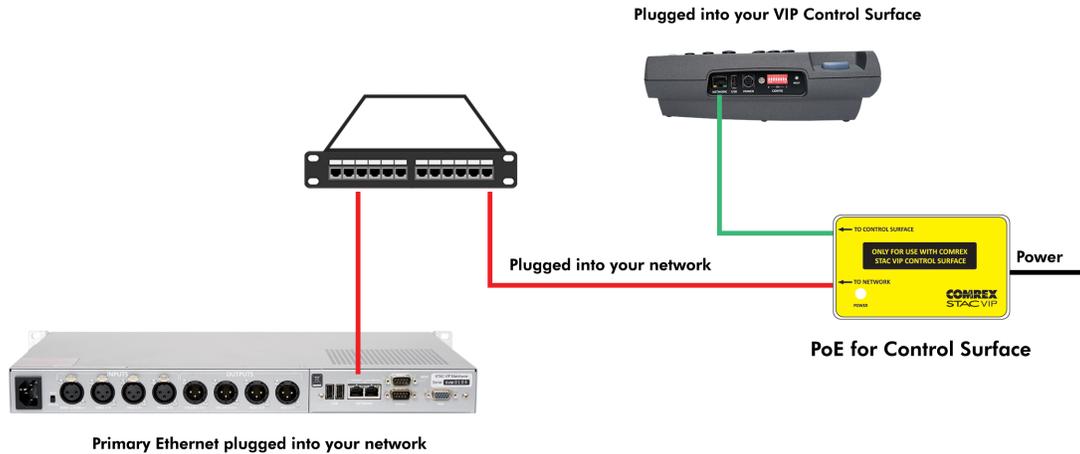
In **Toolbox,** navigate to **Control Surfaces** and select one of the unused entries. By default, control surfaces are disabled. Select an unused entry, then click on the Enabled field. Check **yes**, and then **Save Setting**. Next, select **Scan for Surfaces**. The local LAN will be scanned for the existence of control surfaces and any discovered will be presented by the Ethernet MAC Address (The MAC address is printed on a label on the bottom of the control surface). Select the control surface and all other configuration will happen automatically.
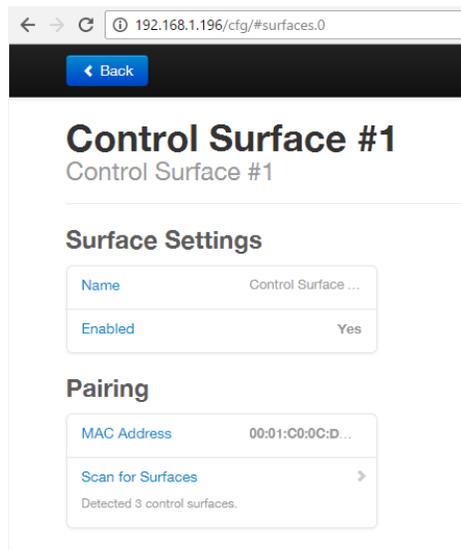
Step 3 - SIP Details

To use STAC VIP, you must input the account details for at least one voice provider or PBX extension.

In **Toolbox**, navigate to **Line Configuration->VoIP Providers->Add Provider**. Here you'll be given a choice between the types of VoIP accounts STAC VIP can handle. We'll focus here on setting up a PBX or cloud provider account (other types are described in the manual) so choose the "**SIP Provider**" option.

Here you will enter the SIP credentials for your account. The name field is just for reference and can be anything. Under the **SIP Provider** entry, you can choose from several popular providers, and the menus will change to help you with the most common settings. If your provider is not listed (or you're using a PBX), choose "**Generic Provider**".

Be sure to press the Save Setting button after <u>each</u> edit to an entry.

At a minimum, a provider or PBX account needs a *user name*, *password*, and *server address* to register. The server address can take the form of a domain name (myprovider.net) or an IP address. Some providers require additional details like *outgoing proxy* and *auth username*. If required, these fields are available under the "show advanced" button, or may be exposed based on the type of provider chosen.

Once all your account information is correct, the "**apply changes**" button will appear. Select this to begin the registration process. Note the STAC VIP SIP subsystem will reset, so don't do this with a call "on-air". Once the system has reset, STAC VIP will attempt to register with your provider and display status on the provider list.

Once you're registered with at least one provider, you can assign the STAC VIP's Lines to that provider.

Important: Simply registering is not enough. STAC VIP's Line(s) must be assigned to your provider(s) before you can use it.

Line assignment is done in **Toolbox** via **Line Configuration->Line Assignments**.

Step 4 - Setting up behavior

Power

What callers hear when on-air

Caller audio Outputs

Connect keyboard and mouse for console interface setup

Connect video monitor for console interface setup

What callers hear when on hold

Aux Out
Selectable mix

Connect your network using Primary Ethernet
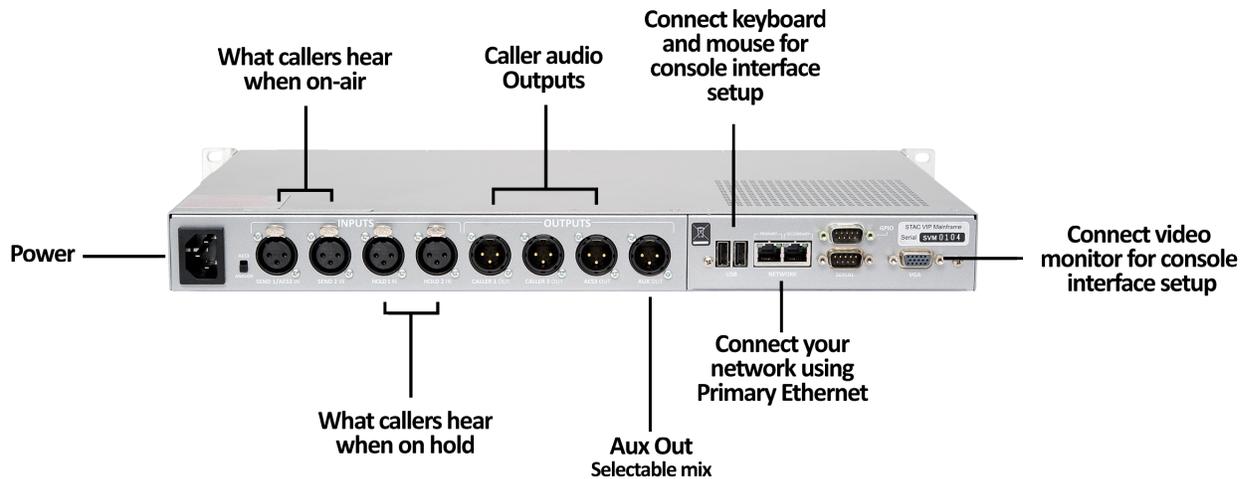
Back at the main **Toolbox** page, selecting '**System Behavior**' allows you to set how the STAC VIP's audio I/O interacts with your studio.

Studio Audio I/O - This setting determines how many "SEND" audio inputs are used and how many "CALLER" audio outputs are used. This setting is only relevant for usage cases where more than one call will be taken at a time. The choices are:

> **Single in/Single Out** - Only SEND 1 and CALLER 1 ports will be used for all calls. Multiple calls will be conferenced on to the CALLER 1 output.

> **Single in/Dual Out** - Only SEND 1 port will be used for audio to callers. Incoming caller audio will be routed to CALLER 1 and CALLER 2 output ports based on the setting of Air Channel Order below.

> **Dual in/Dual Out** - Both SEND and CALLER ports are active, and which call is active on which port is based on the setting of Air Channel Order below.

Aux Audio Output - STAC VIP features an additional output labeled AUX. This output is available in analog format only, and is designed to be routed to a recorder or other device that requires a mix of studio and caller audio.