

SETTING UP AN AUDIOCODES MP-114 GATEWAY TO WORK WITH COMREX STAC VIP

The setup of Gateway devices for use with IP devices such as STAC VIP is not for the meek.

Here is a list of the settings required to get a 4 channel FXO Gateway to work correctly with the STAC VIP. These instructions should be very similar for the MP-118 8 FXO device.

GET INTO THE MP-114 CONFIG PAGE WITH A COMPUTER

From the factory, the unit is configured for a static IP address of 10.1.10.11. This means that in order to change it, you'll need to build a LAN with a subnet around that address.

The easiest way to do this is to connect the Ethernet port of the MP-114 to a laptop or desktop computer directly via an Ethernet crossover cable (or through a spare Ethernet switch). Set the Ethernet port on your computer to a fixed IP near the one on the MP-114 (we used 10.1.10.20). The Subnet mask, gateway and DNS settings shouldn't matter much in this scenario (we used 255.255.0.0, 192.168.1.1, and 8.8.8.8, respectively).

Once this is accomplished, open a browser and key in the default MP-114 address of 10.1.10.11 to open the main config page. The **username** and **password** are **Admin / Admin** (upper case "A" required).

SET THE IP SETTINGS ON THE MP-114 TO SOMETHING REASONABLE

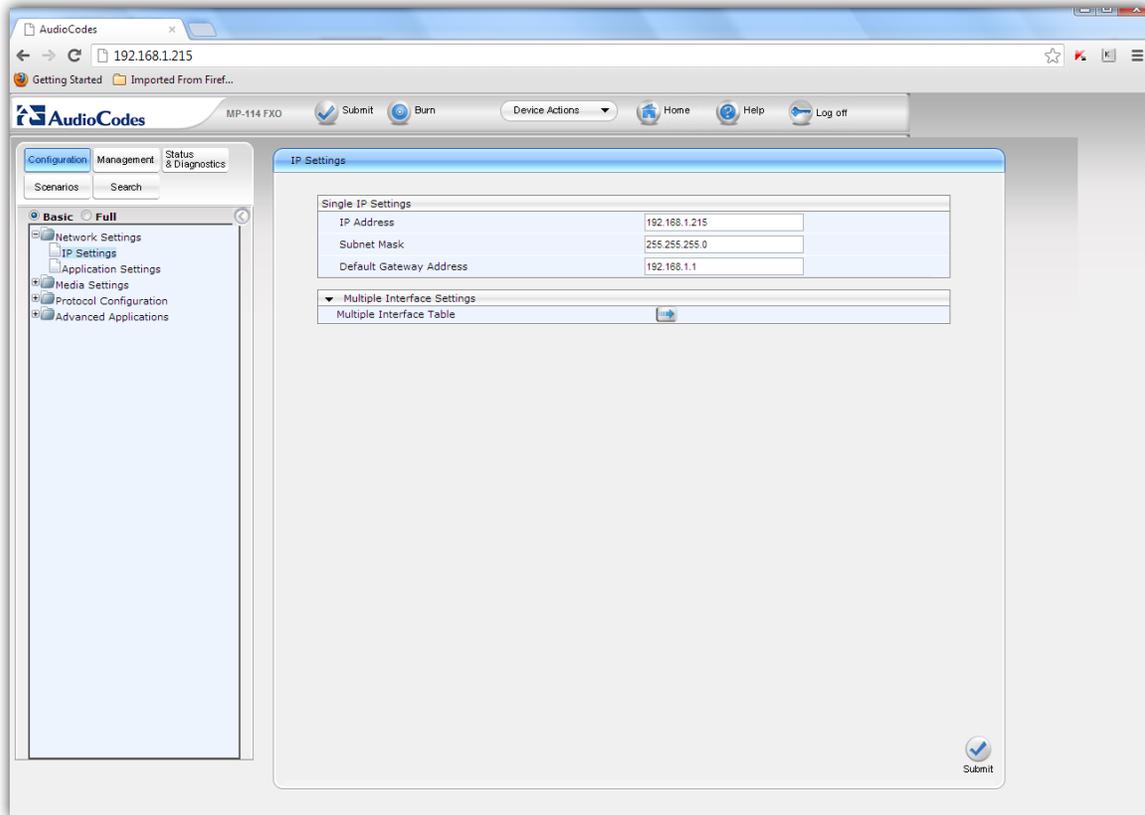


FIGURE 1 AUDIOCODES IP CONFIGURATION

Figure 1 shows the main IP Config page (**Network Settings > IP settings**). Make sure you enter a range beyond the DHCP addressing range on your target LAN, but within the subnet mask. As shown in our example, our LAN stops assigning DHCP addresses over .200, so we went with 192.168.1.215. You'll need to apply the standard subnet mask and gateway info for your LAN.

Once this is correct, click **Submit**. In classic fashion, you'll lose the ability to address the page immediately and you'll need to re-configure your computer for IP settings more typical of your LAN (we used 192.168.1.220).

Note: Do not power cycle the MP-114 in order to move it to your LAN yet. You will lose your IP settings changes if you don't "burn" the settings before a power down.

Re-find the web interface page using the new address and log in. Click **Burn** in the toolbar to save the IP settings to NV memory.

Fun Fact: On a couple of occasions, this process failed for us. Rather than the IP address we had entered (192.168.1.215), the MP-114 stored its own, made up address (192.168.1.50). The only way to figure this out was to find a router with the proper domain settings already applied and look for attached devices.

You can now move the MP-114 to the target LAN. At this point, it is assumed you have a working STAC VIP at a static address as well.

GET THE SIP GATEWAY CREDENTIALS FROM STAC VIP

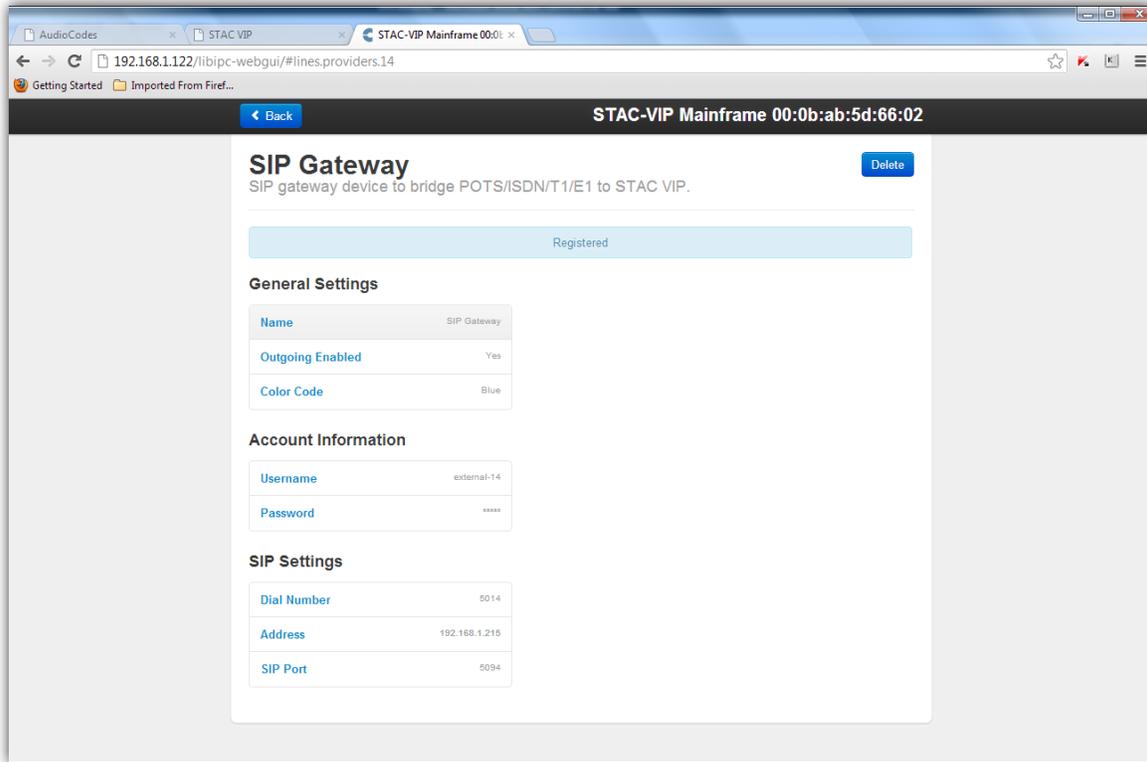


FIGURE 2 STAC VIP SIP GATEWAY SETTINGS

Log into the STAC VIP web interface by typing its address into a computer connected on the same LAN. Make sure you log in using an account that has administrator rights (the admin account is the default).

On the web interface, choose **Config** to open the configuration page (you'll need to resubmit your admin credentials here).

Navigate to **Line Configuration > VoIP Providers > Add Provider** and choose **SIP Gateway Device**.

Make note of the following information that has been assigned automatically by STAC VIP:

- User Name
- Dial Number
- SIP Port

Next, under **Account Information**, add a password to the password entry field (we used *comrex*). Finally, under **SIP Settings > Address** input the IP address you configured the MP-114 for.

You can now click the **Back** button on the config page to go up one layer. Click the **Restart** button on this page to submit the new entries into STAC VIP.

You should leave this page open to check for registration status further on. You can now open another browser page or tab and re-log into the MP-114.

ENTER THE REGISTRATION INFORMATION FOR THE STAC VIP INTO THE MP-114

The MP-114 config pages are a rat's nest of confusing and similar entries, so read the following entries and double check your work before submitting them. Make sure you click **Submit** before leaving any particular page.

Fun Fact: Our MP-114 would not accept the lower case "t" into any entry fields, preferring to leave the target page completely when a "t" was entered. This appears to be a bug with the Chrome browser. We ended up entering our text into an unused field on the computer, and copying and pasting into the entry field.

Start by clicking the **Full** option on top of the menu tree. Skip over the entries under **Network Settings**, **Media Settings** and **Security Settings** completely.

Open the Heading labelled **Protocol Configurations** and go to the sub header labelled **Protocol Definition** and down one more level to **SIP General Parameters**. Change the following entries, leaving everything else as default. From here on, we will call-out the sub-headers and specify each entry that needs changing under it. Don't forget to **Submit** each page before clicking away from it.

SIP GENERAL PARAMETERS

- **Channel Select Mode** > *Ascending*
- **SIP Destination Port*** > *The "SIP Port" entry recorded from the STAC VIP*

****Note: Only the "Destination" Port should be changed. Do not alter the UDP or TCP local ports.***

DTMF & DIALING

- **Max Digits in Phone Num** > **32**

Go up one level and select Proxies/IP Groups/Registrations.

PROXY AND REGISTRATION

- Use **Default Proxy** > Change to **Yes** and click the arrow that appears underneath.

The **Default Proxy Sets Table** appears like this:

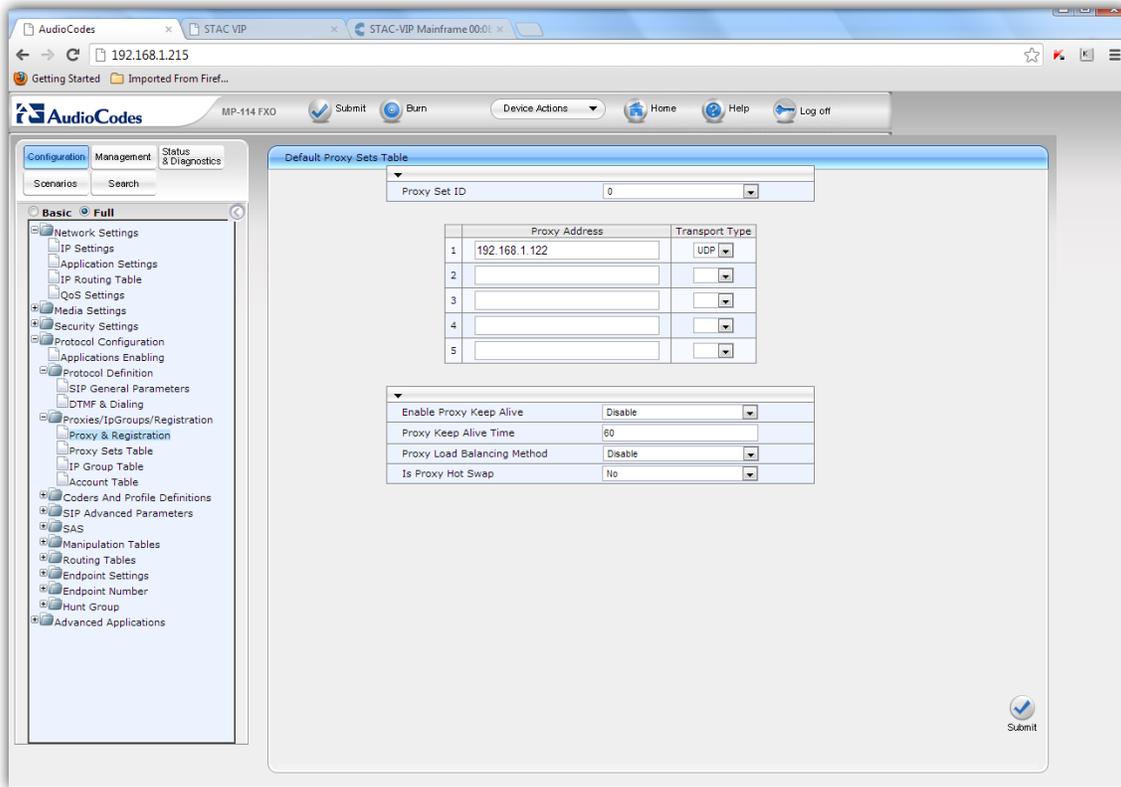


FIGURE 3 AUDIOCODES DEFAULT PROXY SETS

Under entry #1 of the **Proxy Address** table, put the STAC VIP IP address into the field. Make sure the **Transport Type** setting of that first entry is set to **UDP**.

Click back to the **Proxy & Registration** page.

- **Proxy Name** > *VIP*
- **Redundancy Mode** > *Homing*
- **Enable fallback to Routing Table** > *Enable*
- **Always use Proxy** > *Enable*
- **Enable Registration** > *Enable*
- **Registrar Name** > <VIP IP Address>
- **Registrar IP Address** > <VIP IP Address>

- **Registration Time** > **180**
- **Gateway Name** > <VIP IP Address>
- **Gateway IP Address** > <VIP IP Address>
- **Subscription Mode** > **Per Gateway**
- **User Name** > *Provided by STAC VIP in section 3*
- **Password** > *That which was entered into STAC VIP in section 3*
- **Registration Mode** > **Per Gateway**

The next step is to **Submit** these settings, use the **Burn** button (on the top toolbar) to store them, then try to register with the STAC VIP system.

REGISTER THE MP-114 WITH THE STAC VIP

On the bottom of the **Proxy & Registration** Page, click the **Register** button.

Now on the left hand column toolbar, choose **Status & Diagnostics** > **Gateway Statistics** > **Registration Status** — the status of the **Registered per Gateway** entry should read **YES**.

Now click over to the browser tab showing the STAC VIP config page. The **SIP Gateway** entry should read **Registered**.

If so, congratulations, as you've completed the first half! If not, check all your entries carefully.

Fun Fact: The easiest way to reset the MP-114 to factory defaults (without destroying your hard-won IP settings) is to send it a blank .ini configuration file. Just build an empty file using Windows notepad or other text editor, and name it empty.ini.

On the MP-114, on the top toolbar, choose **Device Options** and **Load Configuration File**. Upload the blank file to the MP-114 and all entries will be factory default except the login password and the device IP settings.

SET THE ROUTING OF THE MP-114 TO HANDLE CALLS TO AND FROM THE FXO PORTS

Click Back one level to **Coders and Profile Definitions**.

CODERS

Pull down the first entry under **Coder Name** and change it to **G.711 u-law**.

TELEPHONE PROFILE SETTINGS

- **Enable Current Disconnect > Enable**
- **Dialing Mode > One Stage**

Click Back one level to **SIP Advanced Parameters**.

ADVANCED PARAMETERS

- **Enable Current Detection > Enable**
- **Disconnect Call on Silence Detection > No**

Click Back one level to **Endpoint Settings**.

AUTOMATIC DIALING

For each FXO port, under **Destination Phone Number**, enter the User Name of the STAC VIP settings (external-xx). Leave each channel **Enabled**.

CALLER ID PERMISSIONS

Enable all FXO ports here.

Click Back one level to "Endpoint Number".

ENDPOINT PHONE NUMBER

In the **Channel** field, put a **1** in the first row.

Under **Phone Number**, enter your POTS phone number for the first line.

Under **Tel Profile ID**, enter "0".

Continue for each line. Increment the **Channel** field (1, 2, 3 etc.).

Set each **Tel Profile ID** to **0**.

Click Back one level to **Advanced Applications**.

FXO SETTINGS

- **Dialing Mode > One Stage**

SAVE THE CONFIGURATION FILE

There are several parameters that are required that either don't have entries in the menu system, or where changing them seems to have no effect. So the next step involves saving the current configuration file to your computer, editing it, and reloading the file.

On the top bar of the interface, select the **Device Actions** button and choose **Save Configuration File**.

Choose **Save the INI File**, and give it a name and location you can find.

Open the file in a text editor; under the line that reads:

```
FXSLoopCharacteristicsFilename = 'MP11x-02-1-FXS_16KHZ.dat'
```

Add a line that reads:

```
CurrentDisconnectDuration = 300
```

Under a line that reads:

```
CallProgressTonesFilename = 'usa_tones_13.dat'
```

Add 2 lines that read:

```
VoiceVolume = 6
```

```
InputGain = 6
```

More on this: We found the audio level a bit too low in the default settings, but when we tried to alter them via the menu system nothing happened. Changing them in the .ini file did seem to make a difference, however. If you find these settings are too high or low for your phone lines, feel free to experiment with values from -32 to 32, based in dB.

Now you can save the file as your own .ini file and upload it to the system.

Click the **Device Actions** button again and choose **Load Config file**.

Next choose **Choose File**, find the file on your computer, and upload it with the **Send INI File** button.

Congratulations! Your AudioCodes Gateway should now be set to forward your POTS lines to STAC VIP!