

# Audio Quality on SPA Phones Connected to UC320W

## Objective

This document is one in a series meant to troubleshoot the SPA phones connected to UC320W device. You may experience problems with the SPA phones in a production environment, such as volume issues based on the network. The information in this document was gathered through the collaborative effort of users as they experienced issues with these devices.

## Applicable Devices

- UC320W
- SPA Phones

## Echo

Step 1. These issues are usually traced to the configuration of the specific phones. In other words, callers from both inside and outside the office might experience echo when they talk to people on certain SPA phones. Possible solutions for these types of echo complaints are listed below:

- Lower and save the handset and speaker volume at the phone. In some cases it might be necessary to increase Rx gain at FXO trunks to compensate, but usually reducing the volume of the phone will solve this issue.
- Sometimes headset volume levels can also contribute to problems such as echo. Make sure the headset that is used is one of the approved and tested headsets. Some headsets that plug into the SPA phone handset interface have exhibited echo problems that are resolved by replacement with approved units that use the headset interface of the phone instead of the handset interface. In some cases an adapter that converts the headset's RJ-11 handset interface to the 2.5 mm adapter provided by the phone can resolve the issue, but use of recommended headset is the preferred solution.

## Volume

Step 1. All SPA phones provide speaker and handset volume configuration options. You can change the volume of speaker and headset. This is always the first way to solve a volume problem. You have to make sure that you do not set volume levels too high as this can lead to other complaints, such as Echo.

## Noise

Step 1. Make test calls in order to trace the noise problem to a specific phone or trunk.

Step 2. If your headset is properly connected, SPA phones shouldn't have noise issues in the same way analog phones might. Therefore, complaints about noise level on phones are

likely better addressed in another area of the system. Make sure that there is not a noise that is coupled on an analog trunk connection or ambient room noise conditions where the phones are located (or other acoustically coupled sources) are properly controlled.

Step 3. If the problem is traced to a specific phone, make sure your handset is properly connected.

Step 4. If the problem still occurs, try to swap the handset with another phone and see if the issue follows the handset. If that is the case, the handset might need to be replaced.

## **WiFi**

Step 1. If audio problems only occur on SPA525G phones that use 802.11 Wifi connection to the UC320W, try to change phone placement to correct the problem (be careful to make sure the phones are in range of the UC320W).

Step 2. Ensure there are at least 4 bars of signal strength on the SPA525G(2) phones.

Step 3. Because the phones use 802.11g, look for possible known sources of WiFi interference such as microwave ovens, Bluetooth devices, baby monitors, digital cordless phones or other products that operate in the 2.4 GHz band.

Step 4. Ensure data endpoints are not erroneously configured to use the voice VLAN SSID.