AP Frequently Asked Questions

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Software/Configuration

What is the correct software program to use with my ClearOne units?

Use G-Ware with the XAP product family and the PSR1212.
Use AP-Ware with the AP product family.
There is no software for the GT1524.

When I open AP-Ware, all I see is the background picture. I don't see the Flow Screen or matrix or any of the buttons.

You have an improperly installed dcom98 file. Find the dcom98.exe file in your computer (using the Search feature on your Start menu) and double-click it to begin the dcom98 installation. After the installation and computer reboot, AP-Ware should work correctly.

Why do the labels in AP-Ware look like they are not aligned correctly? Why am I getting a range error?

Your computer display is set to the Large Fonts setting. Change it to Small Fonts. This is done from the Windows Control Panel/Display/Settings/Advanced window.

Why does my AP product keep changing the matrix configuration?

The AP unit will only change a parameter when commanded. A likely candidate for causing an undesired change is an external control device connected to the serial port. For example, after a power outage, an external control device will, on power up, reboot and search for connected items. This searching may send some data that the unit interprets as a parameter change.

Should I set my mic gain setting to the 55dB level or the 25dB level?

Most microphones will use the 55dB setting. There are some microphones that are designed with a higher sensitivity specification. Check with the manufacturer of your microphone to get the sensitivity specification. If your microphone has a sensitivity spec in the -25dB to -35dB range, it will probably sound best when set to the 25dB setting in the AP unit. You would then raise the Gain Adjust in the AP unit to get a 0dB to +4dB level reading at the meter. If the sensitivity spec is -45dB or greater, the 55dB setting is usually the best. Microphones with a sensitivity spec in the -35dB to -45dB range should be tested to see which input level sounds the best.

How do I change the mic/line input from a mic input to a line input?

Using AP-Ware/AP Tools, disable Phantom Power on the mic input, change the Coarse Gain to Line, disable Echo Cancellation, turn off NLP, and change the gating to Override-On.

Can I set up my AP system in a stereo configuration?

Yes. It is best to keep the stereo input and stereo output on the same AP unit so as not to tie up any G-link buses. The echo cancellation reference must be set up to include both stereo channels so the echo canceller can sample all the stereo program audio for proper echo cancelling.

Firmware

How do I determine the firmware version in my unit?

The firmware version is accessed through the front panel LCD screen. For XAP and PSR products, press Enter twice and the up arrow once. For AP and GT1524 products, the firmware version is displayed on the LCD screen until a front panel button is pressed. If a button is pressed, you will need to wait 10 minutes for the version display to return or power cycle the unit and the version will display. The telephone hybrid units do not have an LCD. You can find the firmware version by checking in the Unit Properties window when connected with AP-Ware.

How do I upgrade the firmware of my AP unit?

AP-Ware releases always include the necessary firmware files to update your units. See the [AP-Ware Firmware Upgrade Technical Note](#). You will also find upgrade instructions in the help file.

Echo Cancellation

What is EC Ref?

Echo Cancellation Reference. Echo cancellation is the removal of echo based on a comparison of incoming audio and outgoing audio (i.e., preventing distant site audio picked up by microphones from being retransmitted to the originating site). In order to work, the echo cancellation circuit needs to know what output audio to look for. The EC Ref point is the output each microphone will sample for the comparison. The reference channel can be an output or a G-Link output (to reference an output on another unit).

Why do the callers still hear echo even though I have set the EC Reference channel?

There are several reasons callers might hear echo.
- · Verify that each microphone is using the correct EC reference.
- · If the output of the EC Reference channel is muted, the EC comparison will not take place, and therefore the EC will act as if it is turned off.
- · EC References are not set up properly for linked units. Make sure each unit is referencing the proper EC channel over the G-Link.
- · Microphones settings are too sensitive. Settings should read between 0dB to 5dB on the Post Gain meter.
- · Room is very live and reflective. You can increase the unit's ability to suppress echo by changing the NLP to Medium. However, the best solution is to acoustically treat the room to reduce audio reflections.

Installation

Can I use push-to-talk microphones with Audio Perfect products?

You can use push-to-talk or push-to-mute microphones with AP products, but they must be connected properly to avoid bypassing the AP echo canceller. When a microphone changes state by pressing the On/Off button on the microphone, the AP unit will try to adapt to the change. However, the echo cancelling circuit may not be able to converge quickly to such a large level change. If a "push to talk" feature is required for the microphones, it should be connected to the AP unit's Control/Status port so it will mute the microphone channel but not the microphone itself when the On/Off button is pressed. This will allow the AP unit to properly track level changes from the microphones.

What is Flow Control and should I have it enabled?

Flow control helps keep stable serial communication with the external device. If the data stream overruns the buffer for a moment, Flow Control will pause the data stream until the buffer has room to accept more data. For a multi-unit system, it is only necessary to activate Flow Control on the AP unit directly connected to the RS-232 device. If you have an external control device plugged into the RS-232 port of an AP unit and you are using a pin-to-pin 9-pin serial cable with all pins connected, Flow Control should be turned on. Those units with no connection to its RS-232 port should have Flow Control pff.

A device using a serial cable with only pins 2, 3, and 5 connected can communicate with the AP unit. However, the device will not work if Flow Control is on.

Can I connect a XAP unit to an AP unit?

No. The XAP and PSR1212 units are not compatible with AP units.

I am trying to send commands to the AP800 or AP400 via RS-232. The manual shows a flag to begin the command. What does the flag mean?

The flag indicates the beginning of a new command but should be entered as a # sign in the serial command. The flag symbol is not used in the current revision of the manual.

No Class Registered Error

When I try to run AP-Ware, I get a "No Class Registered Error."

This error is caused by improper software installation. When using Windows NT, 2000, or XP, you must log on as the administrator before attempting to install software. To resolve this issue, log on as the administrator and re-install AP-Ware.

Audio Performance

I am not getting any audio from an output on an AP800 or AP400. What should I check first?

1. Verify that the line or mic inputs are not muted. Check the metering on the input. The audio should peak at approximately +4dB.
2. Verify that the output in question is not muted. Check the metering on the output. The audio should peak between 0 to +4dB.
3. Verify that the necessary mic or line inputs are routed to the output in question.

Why is the level on my microphones so low and broken up? When I increase the level of my microphones they don't get louder; they just sound worse.

There are two possibilities:
•· Microphones are being routed to the EC reference channel. Change microphone routing so it is no longer routed to the AEC reference channel.
•· There is no audio routed to the EC reference channel.

Presets

How do presets work on Audio Perfect products?

The AP400 and AP800 have six selectable presets that can be configured through the front panel LCD screen or the RS-232 port. Each preset is really a complete configuration setup. From the factory, each preset contains the same default settings. To change the configuration within a preset, select a preset number and make all the desired changes. The changes are automatically stored as they are made. This means if you select a different preset number and then come back to the preset number where you made your changes, all your changes will still be there. Presets do not lose any setup changes if you move between presets or if power is lost to the AP unit.

How do I copy/paste presets in AP-Ware?

There are six preset buttons at the top of the Flow Screen. Right-click on the button for the preset you want to copy and select Copy from the shortcut menu. Then right-click on the button for the preset you want to paste to. Select Paste.

Can I run presets from the front panel of a ClearOne unit?

Presets can be triggered from the front panel of any AP unit.

G-Link

What is the G-Link bus and what does it do?

The G-Link bus is a four channel mix-minus digital bus on every AP800/400 unit. It sends audio and data to other properly connected and configured units. Audio placed on the bus travels to other AP800/400 units but is not returned to the sending unit. The four buses are the X-bus, Y-bus, Z-bus, and G-Link EC reference bus. The AP10 sends and receives only data on the G-Link bus.

How does audio pass between AP units?

Audio passes between AP800 and AP400 units on the G-Link cable as digital signals. Audio to and from an AP10 is a hardwire line level connection to another AP unit.