# **ClearOne**

# APPLICATION NOTES

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## CONNECTING THE CLEARONE CONVERGE PRO TO AVAYA ENTERPRISE PHONES

### Purpose

This document describes how to connect the ClearOne Converge Pro to the Avaya enterprise phone using the ClearOne CHAT Avaya phone breakout kit. Available for the CHAT 150 is an accessory phone breakout kit that provides connectivity to the Avaya enterprise phone systems. The phone breakout kit can be used to interface the Converge Pro to the Avaya enterprise phone headset jack.

With this interface, the user gets the features and functions of the Avaya enterprise phone while conferencing.

### Connecting the Converge Pro to an Avaya Enterprise Phone

To connect the CHAT 150 Avaya phone breakout kit to the Converge Pro you will need:

- CHAT 150 Avaya phone breakout accessory kit, part number 860-156-222L
- Converge Pro unit with an available microphone input and line output.
- Avaya 2400, 4600 or 9600 series enterprise phone with a headset port.

#### **Connecting the Converge Pro**

Using the cables that came with the CHAT 150 Avaya phone breakout accessory kit and the mini phoenix block connectors that came with the Converge Pro, modify the RJ45 cable and make the connections as shown in Figure 1.

» **NOTE:** The power supply that came with the CHAT Phone Breakout accessory kit is not needed for this application.



#### **Configuring the Converge Pro**

The Avaya enterprise phone produces a line echo/side tone from the transmit audio to the receive audio that is not desirable in a conferencing application. Using a microphone channel with Acoustic Echo Cancellation (AEC) on the Converge Pro will eliminate this side tone. The following steps describe how to set up AEC and other required settings on the Converge Pro.

Connect to the Converge Pro using Converge Console. Open the microphone channel view of the microphone connected to the CHAT phone breakout kit. The following settings shown in figures 2, 3, and 4 must be set:

- Click on the **PPWR** button to turn the Phantom Power off (Point 1 in Figure 2)
- Set the Gain Course slider to 28 dB (Point 2 in Figure 2)
- Set the **Gain Fine** slider to 0 dB (Point 3 in Figure 2)
- Set the PA Adapt and AEC Reference to the output connected to the CHAT phone breakout kit (Point 4 in Figure 2)



## Figure 2

- Ensure the **AEC** tab is selected (Point 5 in Figure 3)
- Verify that the **Enable Acoustic Echo Canceller (AEC)** checkbox is not checked. If it is, click on it to disable AEC (Point 6 in Figure 3)
- Set the Non-linear Processing (NLP) to Soft by selecting the **Soft** radio button (Point 7 in Figure 3)
- Click on the **Gating** tab (Point 8 in Figure 3)



• In the Manual Gating section of the Gating tab window, click on the **Manual On** radio button to set Manual Gating to on (Point 9 in Figure 4)

AEC NC Filter AGC/ALC Gating			
Gate Status Gate Settings	- Amhient Tracking	- Processing Functions	Post Gate
Auto Geting C Auto Geting C 15 dB C Gete Ratio 0.3 sec Hold Time 12 0 dB C Off Attenuation Decay Rate Medium	Antibert Tracking  Adaptive Ambient  Manuel  Ambient Level	Chairman Override  PA Adaptive Mode PA Adaptive Mode Cisco HS Tx	-
 Manual Gating Manual On C Manual On C Manual Off C Manual Off C Manual Off C	Processing		- - -30 dB
 Geting Group	Internal 2 3 4 A B C C C C C C C		

## Figure 4

- In the **Gating Group** section of this window, ensure the **None** checkbox is checked. If it isn't, click in the checkbox to set the **Gating Group** option to **None** (Point 10 in Figure 4)
- Click on the **Close** button to exit the Gating Setup screen

The Converge Pro output channel that is connected to the CHAT phone breakout kit also needs to be configured.

- Open the output channel view for the output of the Converge Pro connected to the CHAT phone breakout kit
- Adjust the **Gain** slider so 0 dB is displayed (Point 11 in Figure 5)



When routing audio in the matrix from this microphone, it is best to use a Non Gated (blue) cross point as is shown in Figure 2.

The Avaya phone can now be used as the phone interface for the conference room.

- To place a call that will be routed through the Converge Pro, use the HEADSET button on the Avaya phone.
- To place a private call, not routed through the Converge Pro, use the handset in normal operation.
  - » **Note:** The headset button and the LED on the CHAT phone breakout kit are non-functional in this application.

If you have any questions or need assistance with this application please contact ClearOne Technical Support at 1-800-283-5936 or tech.support@ClearOne.com