



## Description

The following describes how to connect a DCS 6000 Digital Conferencing system to a ClearOne Telephone Interface. This document references the ClearOne Console Software which is used for configuring the ClearOne Telephone Interface line inputs/outputs. The procedures are to be used as a starting point with minor adjustments to be made as necessary.

Note: The configuration and screen shots in this document are for configuring a ClearOne Converge Pro 840T. If using a ClearOne TH20, 880T or 880TA, the same procedures apply.

**Attention: If there is a need to interpret via a telephone line, more equipment will be needed.**

Please contact Listen Technologies to discuss configurations and possible solutions.

## Setting Up the DCS 6000 CU for Teleconferencing

Out of the box, when the unit is in default configuration a few adjustments are required for the CU.

1. Switch on the unit, it starts up automatically in the "Audio Control" menu.
2. Scroll down one click until the "LineIn → Loudspk:" appears with default setting; "Off".
3. Adjust the "LineIn → Loudspk:" setting to "0dB" and press enter to allow the audio from the phone to be routed to the unit loudspeakers.
4. Scroll down one more click to verify that "LineIn → LineOut:" is "Off". This puts the CU into Mixminus mode and prevents the audio from the far end being fed back to the far end.
5. Scroll down two more clicks and adjust "Loudspk Volume:" to a comfortable level for the room when talking into the conference units. Press enter to set the desired volume level. The default setting of "-20dB" will be too soft for most applications.
6. Press the menu button.
7. Scroll down and select the "Configuration" menu.
8. Select the "Save Configuration" option and confirm, this ensures that your settings are maintained when switching the unit off/on.

If the CU is not in the factory default settings you can do two things.

Option 1:

1. Press the menu button.
2. Scroll down and select the "Configuration" menu.
3. Select the "Delete Configuration" option and confirm, this returns the CU to the factory/default mode.
4. Power Cycle the CU.
5. Follow steps 1-8 listed above.

Option 2:

1. Select the "Audio Control" menu.
2. Adjust the following settings:
  - Loudspk volume: -13dB
  - Lineout volume: 0dB
  - MIC -> Loudspk: 0dB
  - MIC-> LineOut: 0dB
  - LineIn -> Loudspk: 0 dB
  - LineIn -> LineOut: Off
  - LineIn Level Adj: 0dB

## Connect an Analog Phone Line to the ClearOne Unit

1. Connect a standard analog line to the Telco Line connector on the back of the ClearOne unit.
2. Connect an analog phone to the Telco Set connector on the back of the ClearOne unit as this is needed for dialing.

## Connecting the Line Inputs/Outputs

1. Connect the "Line Input" from the DCS 6000 CU (XLR connector) to the line output on the ClearOne unit (Phoenix connector).
  - a. On the Converge Pro 840T, this should be connected to line output 5.
2. Connect the "Line Output" from the DCS 6000 CU (XLR connector) to the line input on the ClearOne (Phoenix connector).
  - a. On the Converge Pro 840T, this should be connected to line input 5.

### Analog Audio, Line Output (XLR3 male)

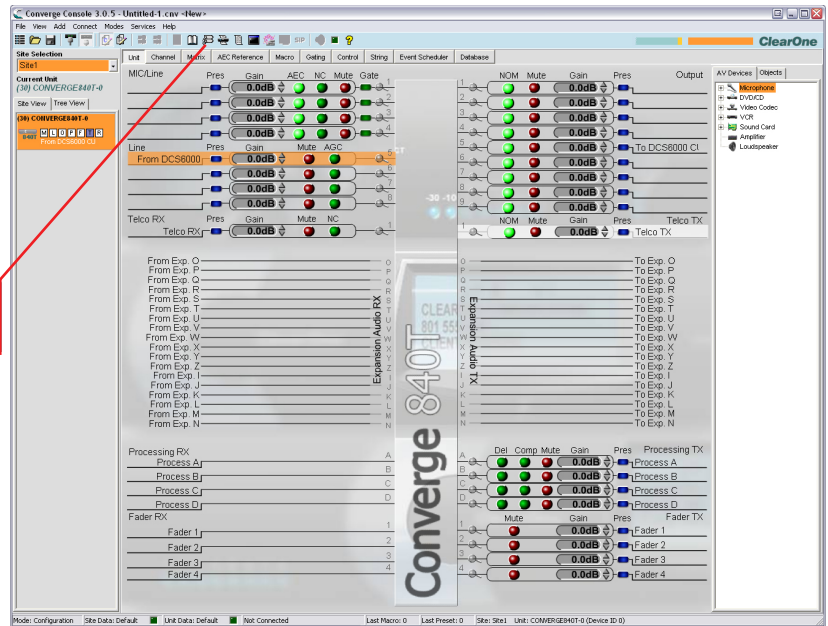
Pin	Signal	Cable type
1	Ground	DIS type #2914 or 2 x 0.25 mm <sup>2</sup> shielded.
2	In phase signal	
3	Out phase signal	

### Analog Audio, Line Input (XLR3 female)

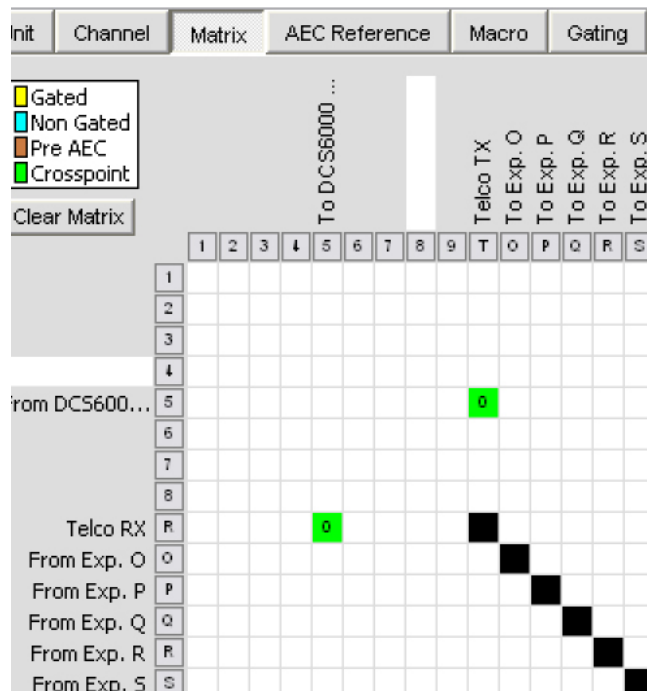
Pin	Signal	Cable type
1	Ground	DIS type #2914 or 2 x 0.25 mm <sup>2</sup> shielded.
2	In phase signal	
3	Out phase signal	

## Configuring the ClearOne Unit Using the ClearOne Console Software

1. Install and configure the ClearOne Console software according to the software installation instructions.
2. Connect your computer to the ClearOne unit using a USB cable.
3. Select the Label Editor from the Services menu or by selecting the Label Editor Icon.
4. Label the inputs and outputs.
  - a. Input 5 is audio coming from the DCS 6000 CU so it should be labeled "From DCS 6000 CU".
  - b. Output 5 is audio going to the DCS 6000 CU so it should be labeled "To DCS 6000 CU".



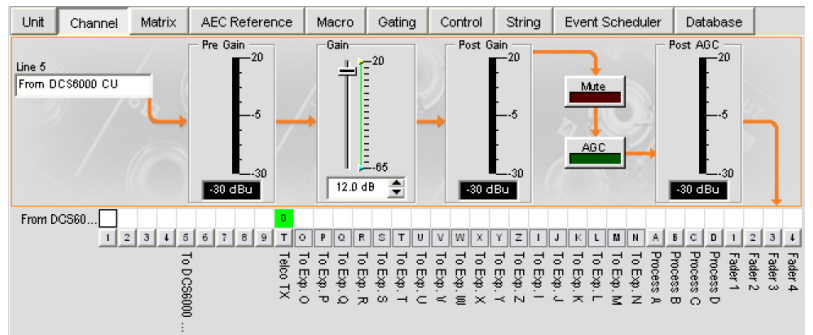
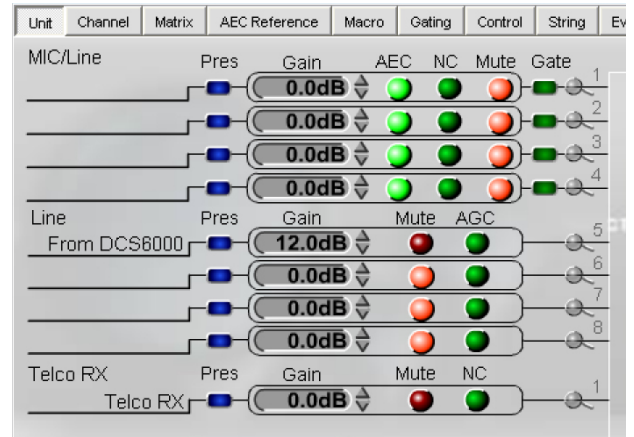
5. Create cross-points using the Matrix.
  - a. Open the Matrix view by clicking on the Matrix Tab in the Unit View.
  - b. Click on "Clear Matrix" to start with a clean matrix.
  - c. Create cross-points by clicking on the boxes where the inputs and outputs cross for the following:
    - Audio from Telco RX (R) input and To DCS 6000 CU (5) output.
    - From DCS 6000 CU (5) input and Audio to Telco TX (T) output.
  - d. You should now have a Green box with a zero (0) in the box for the above cross points like this:



# ClearOne Interface Tech Note

## 6. Adjust Input Gain

- Switch back to Unit View.
- Mute all inputs not used (6-8) by clicking on the red radial mute button on each channel.
- Click on the gray magnifier associated with input 5 to enter Channel view.
- Adjust the "From DCS 6000 CU" gain to +12.0dB.
- Speak into a DCS 6000 mic and adjust as needed to have the Post Gain meter read just above 0.
- Select the Unit tab to return to Unit view.



## 7. Adjust Output Gain

- Mute all unused outputs (1-4, 6-9) by clicking on the red radial mute button on each channel.
- Click on the gray magnifier associated with output 5 to enter Channel view.
- Adjust the output "To DCS 6000 CU" to -4.0dB
- Call into the ClearOne telephone interface unit by calling the phone number of the line that is connected to the unit.
- Once connected, adjust the level so it is reading just above 0.
- Select the Unit tab to return to Unit view.

