Tieline®

The Codec Company

CREATE TWO MONO G3 CODEC CONNECTIONS WITH VIA OR REPORT-IT

This document describes how to configure your Tieline G3 studio codec to connect two discrete mono Report-IT or ViA codec connections simultaneously. When a G3 codec answers a call from another Tieline codec, the dialer will always change the profile loaded in the answering codec if it doesn't match the dialing codec profile. For example, if a mono profile is loaded in the answerer and an incoming stereo call is received, the answering codec will answer and be configured for stereo.

Therefore, if you wish to connect to a G3 codec in dual mono program mode with a ViA codec or Report-IT Enterprise users, these devices must be configured to load the **ManDflt DualPgm** profile on the answering G3, and route audio to the correct encoder/decoder. The steps outlined in this tech note include:
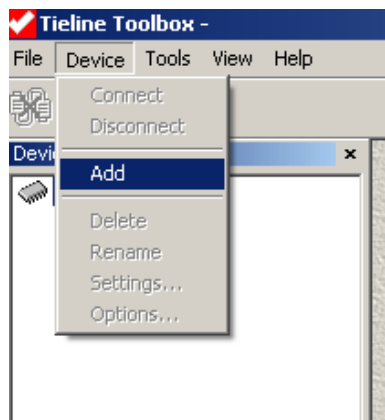
- How to adjust the matrix in the G3 answering codec at the studio to allow two discrete mono connections simultaneously.
- How to set up a ViA codec to dial and connect to a G3 codec in dual mono program mode using IP1 or IP2 dialing configurations.
- How to configure Report-IT so that users can dial and connect to a G3 codec in dual mono program mode using IP1 or IP2 dialing configurations.
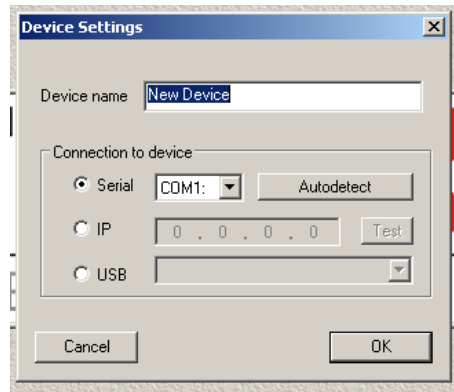
PREREQUISITES

Ensure you are using Report-IT Enterprise for Android or iOS v3.7.x or higher and G3 firmware v.1.6.144 is installed before configuring the following settings.

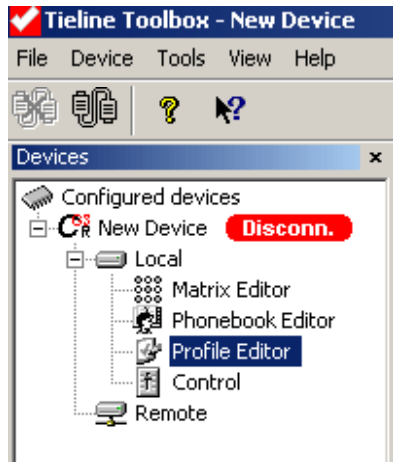## CONFIGURE THE STUDIO G3 CODEC TO ANSWER TWO MONO CONNECTIONS
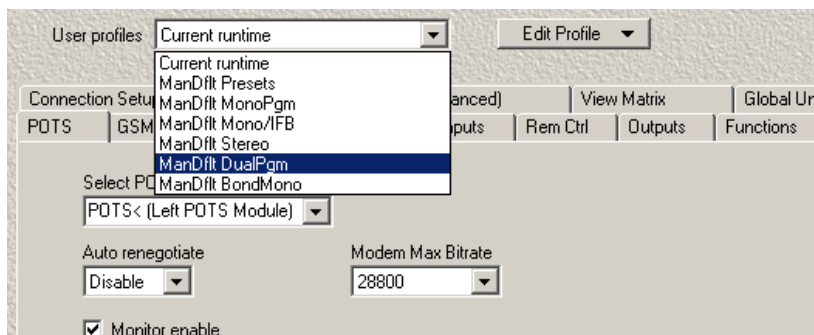
1. Connect G3 Toolbox software to the G3 codec.

2. Choose the preferred connection option and click **OK** to connect. Note: IP is quickest and recommended, *and USB is no longer supported.*
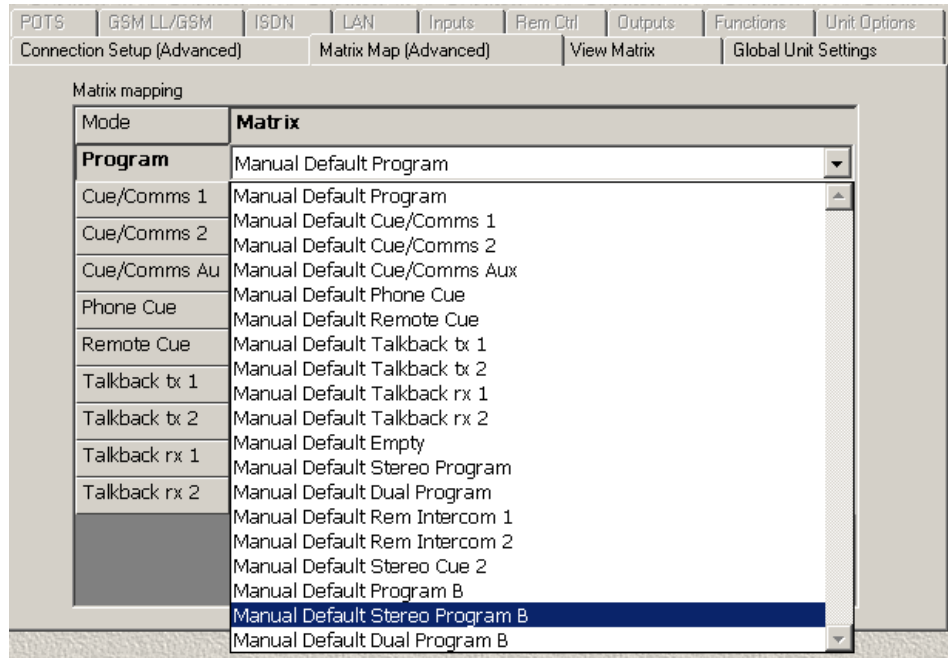

3. Click on Profile Editor and select the **Matrix Map** tab.
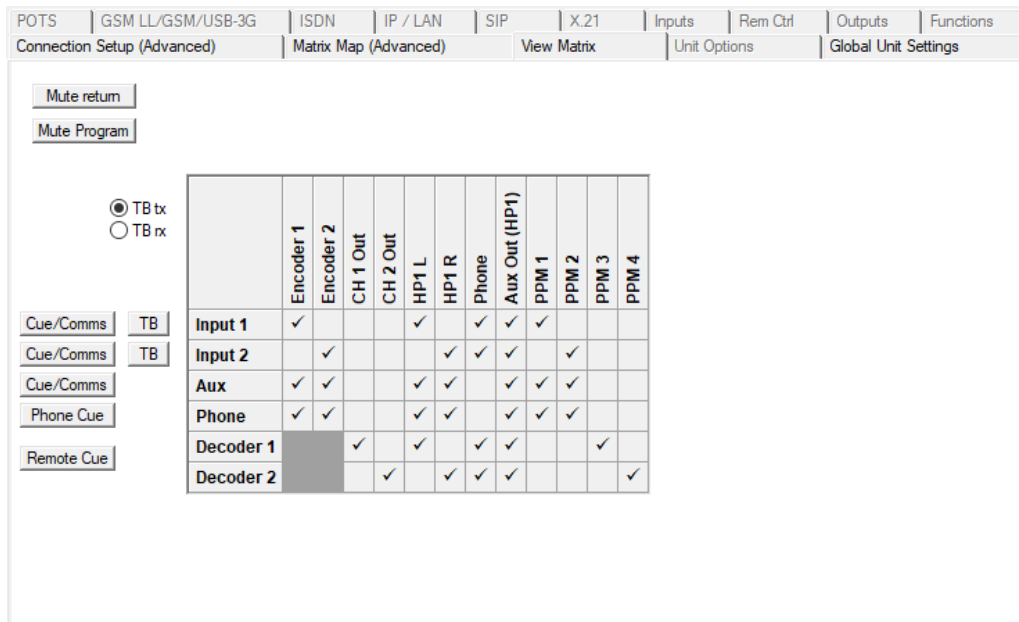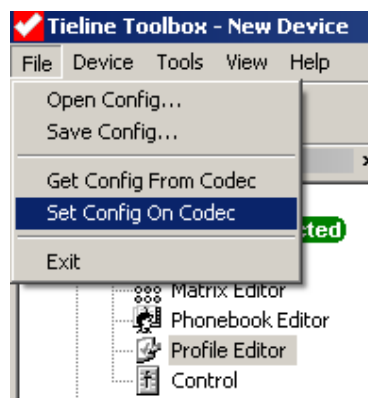

4. Select **ManDflt Dual Program**.

5. Select the **Matrix Map (Advanced)** tab. Then click on the right-hand corner of the **Program Mode** and use the drop-down menu to select **Manual Default Stereo Program B**.

6. The **Manual Default Stereo Program B** matrix lets you connect two independent bi-directional channels with Input 1 feeding Encoder 1 and Input 2 feeding Encoder 2. This allows discrete bidirectional audio: 2 mono program feeds with 2 IFB mix-minus feeds.
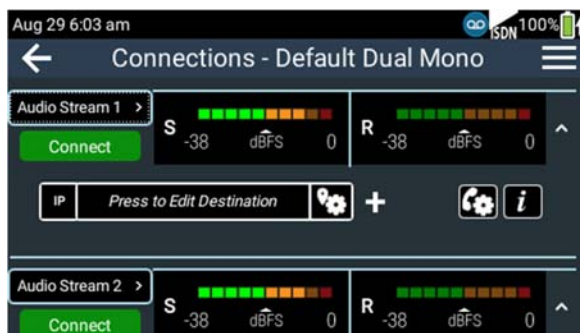

	Encoder 1	Encoder 2	CH 1 Out	CH 2 Out	HP1 L	HP1 R	Phone	Aux Out (HP1)	PPM 1	PPM 2	PPM 3	PPM 4
Input 1	✓				✓		✓	✓	✓			
Input 2		✓				✓	✓	✓		✓		
Aux	✓	✓			✓	✓		✓	✓	✓		
Phone	✓	✓			✓	✓		✓	✓	✓		
Decoder 1			✓		✓		✓	✓			✓	
Decoder 2				✓		✓	✓	✓				✓

7. Use Toolbox to transfer the changes onto the codec using **Set Config On Codec**.
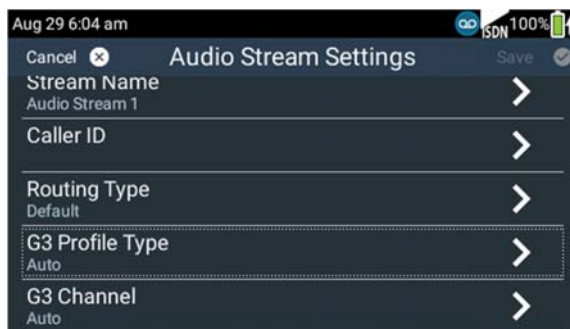

CONFIGURE VIA TO CONNECT TO A G3 CODEC IN DUAL MONO PROGRAM MODE

To connect a ViA codec to a Commander G3 in dual mono program mode configure the following:

1. Navigate to the Connections screen on the ViA codec.
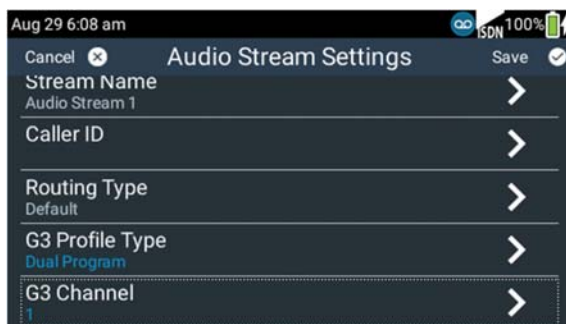2. Tap **Audio Stream 1** in the top left of the screen.
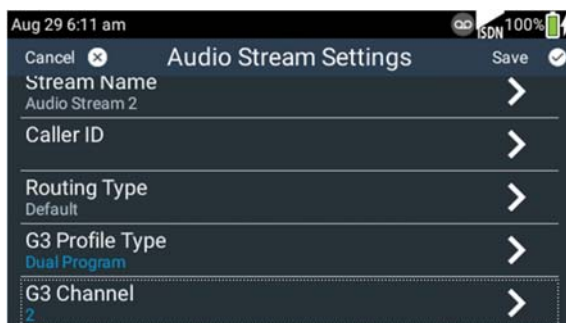

3. Next, tap **G3 Profile Type**.

4. Select **Dual Program** and tap **Done**.

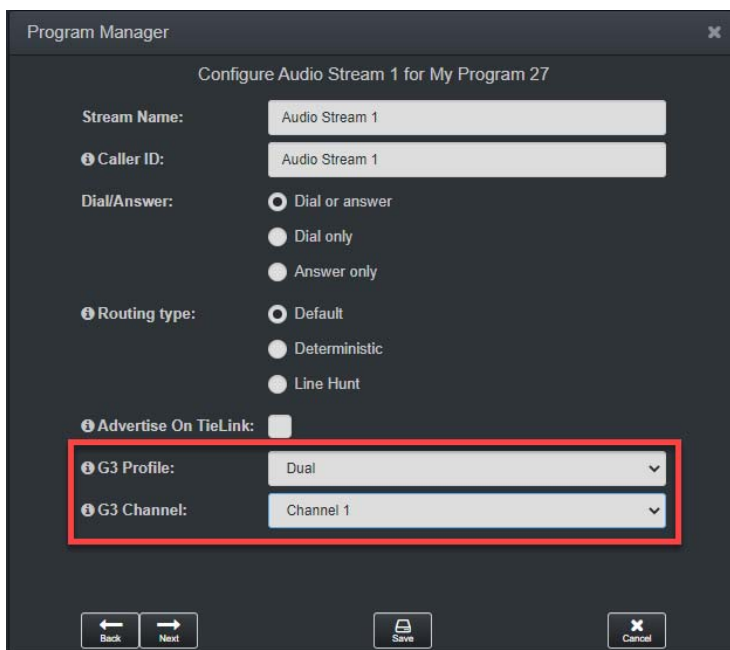5. Next, tap **G3 Channel** and select **1**, then tap **Save** in the top right of the screen.

6. Next, tap **Audio Stream 2** and configure the **G3 Profile Type** as **Dual Program** and the **G3 Channel** as **2**, then tap **Save**.

This ensures the correct encoder is used by the ViA when dialing IP1 and IP2 connections on a G3 codec.
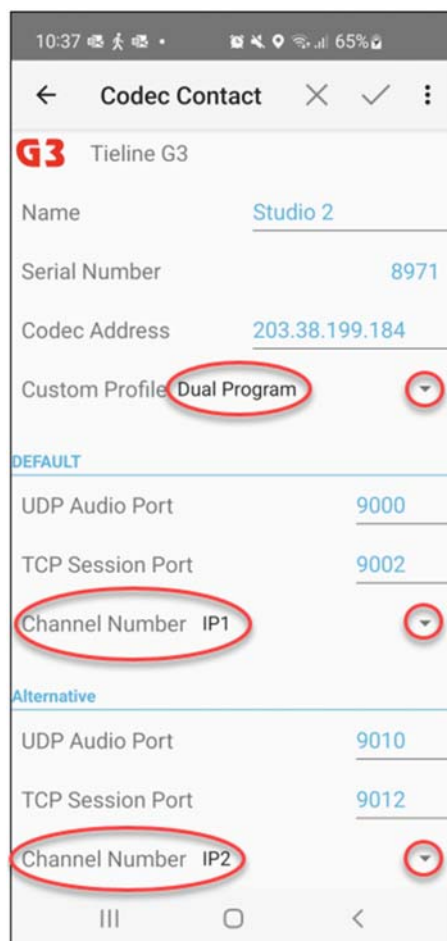
This setting can also be configured for each stream using the Toolbox HTML5 web-GUI using the **Program Manager panel** when creating a new program.

CONFIGURE REPORT-IT TO CONNECT IN G3 DUAL MONO PROGRAM MODE

To support dual mono connections with G3 codecs using Report-IT it is necessary to configure settings in the TieServer Console app (Android or iOS) or web-GUI.

In the TieServer Console app log in and select **Codecs > [select G3 codec] > Custom Profile > Dual Program**. Also ensure IP1 and IP2 are configured as available codec endpoints for each Report-IT user account that needs to dial this codec. Following is an example of codec settings in the Android TieServer Console app to support dual mono program mode in G3 codecs.

Save this configuration and ensure Report-IT users dial the correct endpoint, either IP1 or IP2. When the first Report-IT user dials this codec using one of these configured IP1 or IP2 connections it will ensure the Dual Mono program is loaded in the Commander G3, to facilitate dual mono connections. Note: Default Tieline ports are displayed in the previous example.

KEY POINTS TO NOTE

- When dialing over IP, one remote codec must use 'codec channel 1' and dial over IP 1 and the other remote codec must use 'codec channel 2' and dial over IP 2.
- The algorithm and sample rate must match on both devices dialing the G3 codec. Tieline recommends configuring Tieline Music encoding.
- Default port allocations in G3 dual mono program mode:
  - IP 1 = Audio Port 9000 & TCP Session Port 9002
  - IP 2 = Audio Port 9010 & TCP Session Port 9012
- If another Commander or i-Mix G3 codec is one of the dialing codecs, please see the tech note at https://tieline.com/wp-content/uploads/bsk-pdf-manager/2019/06/Bcast-Tech-note-20-Bidirectional-Dual-Program-Connections-rev1.pdf for configuration instructions.