Broadcast Tech Note 001: Connecting Your Codec to Toolbox Software and Upgrading Codec Firmware

1.1. Connecting your Codec to Toolbox Software

Connection of your codec to a PC with ToolBox is possible via a USB, LAN or serial cable. After ensuring the cable between your computer and your codec are connected properly, you will also need to determine if the firmware version on your codec is the same RPTP version as the version of ToolBox that you are attempting to connect with. This should be displayed in the file name of the software. Older versions of software may not display the RPTP version number. For more information on software compatibility, please see the Updating Firmware section within this Tech Note, or visit support on the **Tieline** Technology website at www.tieline.com .

1.2. Updating Firmware

From time to time it may be necessary for you to update the firmware on your codec. This is a simple procedure. To check for the latest software available, and to download ToolBox, please visit the support section on our website at www.tieline.com.

If you require new codec firmware, click on the "I need an upgrade" link on the software support page and complete the "Software Upgrade Request Form".

If you are upgrading or downgrading the firmware version in your codec, you will require the matching version of ToolBox software for your firmware - if you wish to use ToolBox to configure your codec. You can match the version of firmware and ToolBox software by checking the RPTP version in the file name for each software package.

For example, if you are using ToolBox software v.XXXX RPTP74, then the firmware version you install in your codec must be an RPTP74 version or ToolBox will not be able to communicate with your codec.

If you are simply wishing to upgrade the firmware in your codec, you can use any version of ToolBox to do this.

To find out what version of software you are running on your codec, go to the Unit Details menu item on the codec. Unit Details will list all the programs installed along with their versions. To scroll down the list simply rotate the MENU SELECTOR.

The firmware updating process is as follows:

1. Once you have attached your codec to a PC via a USB, LAN or serial cable, open ToolBox and you will see the *Upgrade* button on the software toolbar (there is no need to 'connect' your codec to ToolBox software). Press this button and the *Firmware upgrade* window will open.
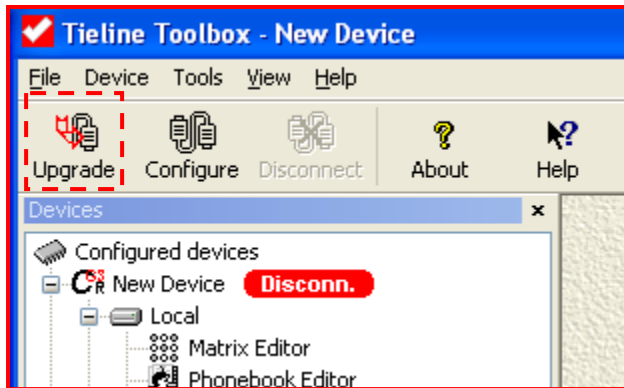
If you try to upgrade firmware while ToolBox software is connected to the codec, the following error message will appear. Click yes to disconnect the codec and proceed with the software upgrade.
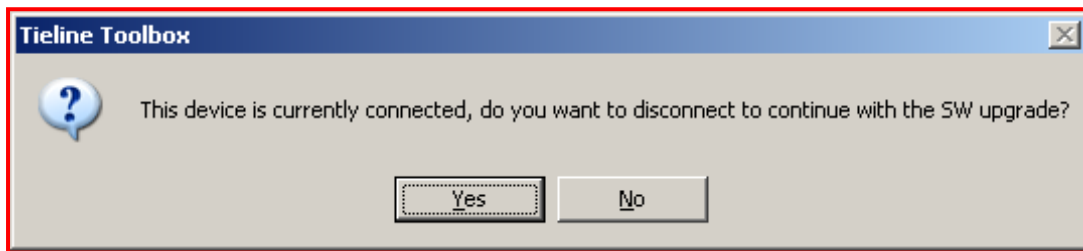
2. Click on *upgrade SW...* to upgrade the software.
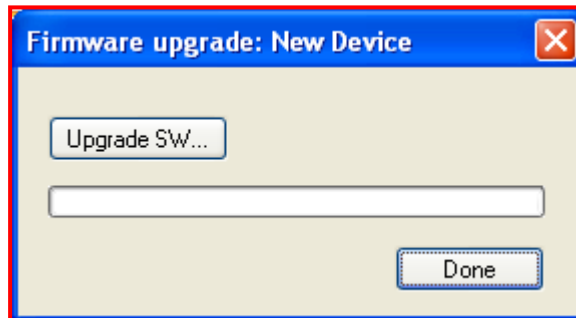
3. Click on the *.bin file that you wish to load into the codec and then click on *Open*. (If an error message appears during this step please see the <u>Software Upgrade Error Messages</u> section that follows.)
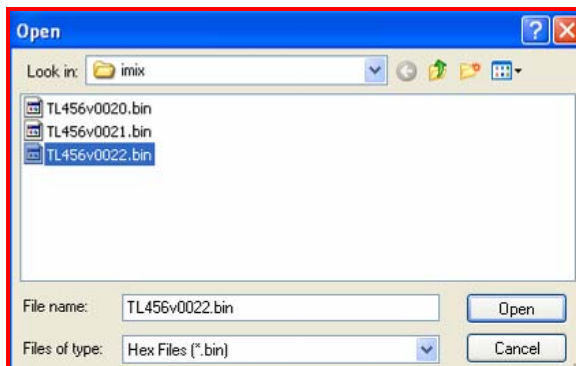
4. The file loading process will continue and progress can be monitored by viewing the green update bar. The update process can take several minutes.
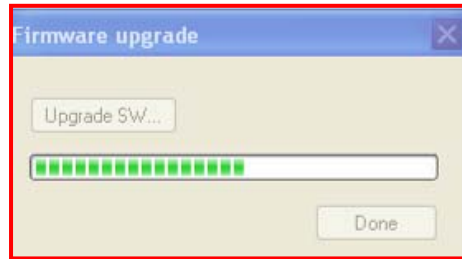
5. Once the update has been successfully completed a new message will advise you of this. Click *OK* and proceed with using the codec. The codec will automatically reboot itself after upgrading.
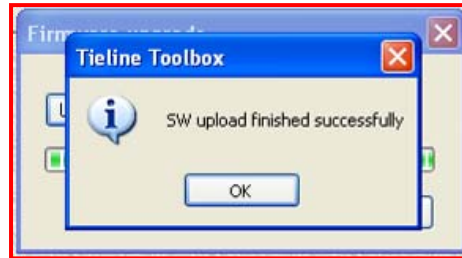
1.2.1. Upgrading Via the Tools Menu

You can also initiate the firmware upgrade process by clicking on the *Tools* drop-down menu in ToolBox and selecting *Firmware upgrade.* The process of upgrading is very similar to using the *Upgrade* button in the toolbar. The only difference is an additional step when you first select *Firmware upgrade*. The *Select device* window will open and ask you to select the device you wish to upgrade. Simply select the device you want to connect to and click *OK*.
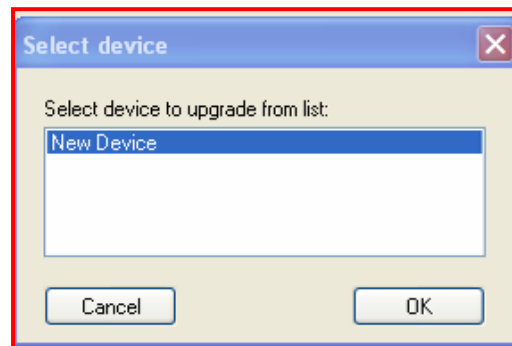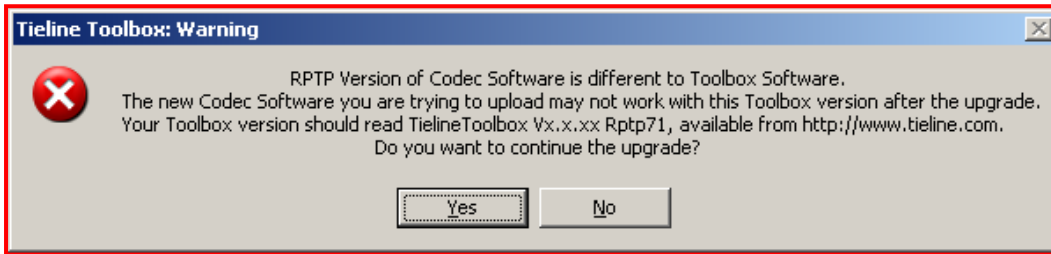
Once you have completed the upgrade process, you are advised to set the system defaults on the codec. To do this press SOFTKEY 4 to access the Menu submenus, then scroll down to Configuration then scroll to Advanced menu then choose Set System Default, then choose All profiles, then choose Yes.
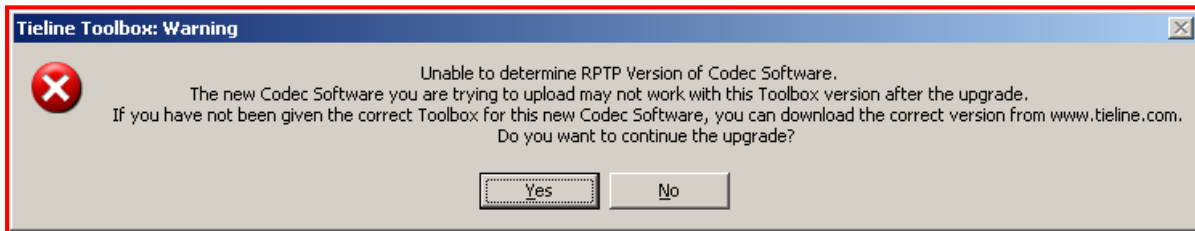
1.2.2. Software Upgrade Error Messages

Some error messages may appear during step 3 of the upgrade process.

If the *.bin file that you select to load into the codec is a different RPTP version to the ToolBox RPTP version you have on your PC, the following message will appear:

Tieline Toolbox: Warning

RPTP Version of Codec Software is different to Toolbox Software.
The new Codec Software you are trying to upload may not work with this Toolbox version after the upgrade.
Your Toolbox version should read TielineToolbox Vx.x.xx Rptp71, available from http://www.tieline.com.
Do you want to continue the upgrade?

[Yes]   [No]

If the *.bin file that you select to load into the codec is an old firmware version without an RPTP version number, the following error message will appear:

Tieline Toolbox: Warning

Unable to determine RPTP Version of Codec Software.
The new Codec Software you are trying to upload may not work with this Toolbox version after the upgrade.
If you have not been given the correct Toolbox for this new Codec Software, you can download the correct version from www.tieline.com.
Do you want to continue the upgrade?

[Yes]   [No]

With all of these error messages, you can proceed with the upgrade process and download the matching version of ToolBox by visiting our website's software support page at http://www.tieline.com/support/software.html.


Firmware Upgrade Troubleshooting Tip: If you are having trouble performing the upgrade, try powering the codec down and then up again. If you are upgrading via a USB connection, check to see that the USB cable is seated well in the codec.

1.3.   Connecting Your Codec to Your PC

Once you have the correct software installed on your PC and in your codec, you can initiate connection between your codec and your computer by following these steps.

1. Click on the device logo for the codec in the *Configured devices list* that you wish to connect to. This selects the device as the one that you will connect to.
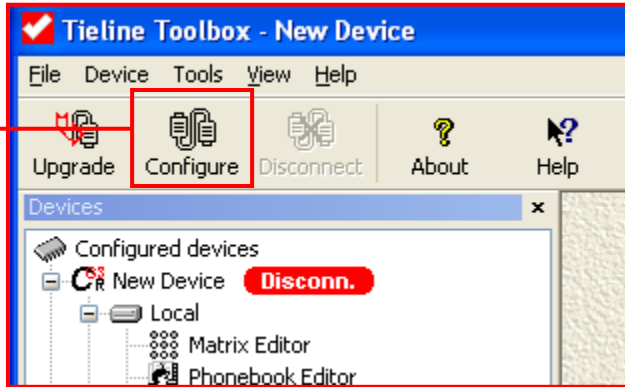
   COMMANDER
   G3 device logo
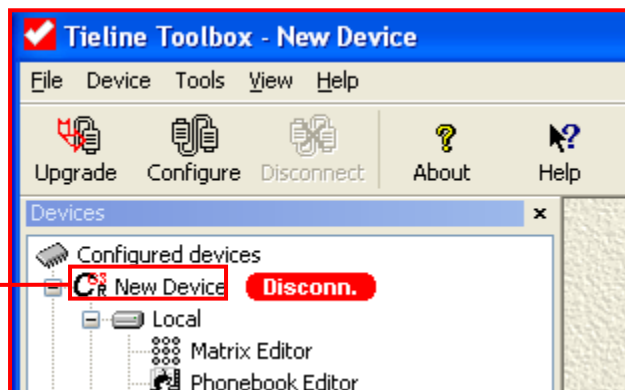
2. Next, click on the *Configure* link logo. This will connect you to the codec.

'*Configure*' link logo

Once connected, the grayed-out *Disconnect* logo will become active and assume a black outline with a red cross.

The codec is now able to communicate with ToolBox on the PC. The red disconnected *(Disconn.)* device goes to a green *Connected* mode. You can change the settings on your codec and any remote units to which your local codec is connected via ToolBox software.

(If an error message appears during the connection process, please see the Toolbox Connection Error Messages section that follows.)

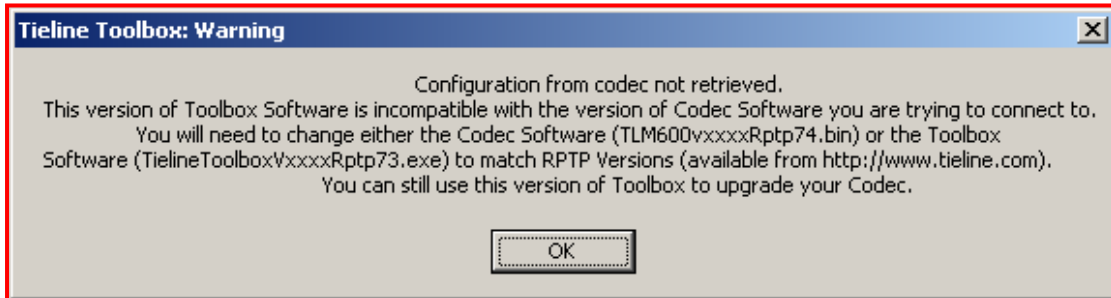3. Simply click on the *Disconnect* logo to disconnect ToolBox from the codec.
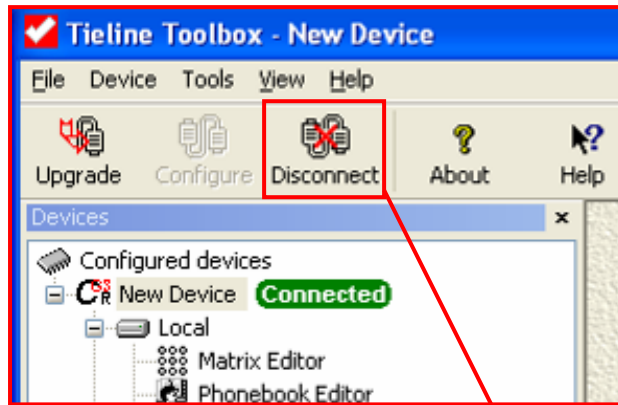
'*Disconnect*' link logo

1.3.1. Toolbox Connection Error Messages

If the following error messages appear you will need to download the appropriate RPTP firmware version or the appropriate RPTP ToolBox version so that they match.

In the previous example, the RPTP versions of both the codec firmware and ToolBox are displayed to enable you to easily determine which RPTP version of software you will need to download.

In the next example, an older version of ToolBox without an RPTP version is installed on the PC. You will need to check the support page on our website at www.tieline.com to determine what version of codec firmware will work with your version of ToolBox. Alternatively, you can download a newer version of ToolBox to match the codec software you have installed.