TELEX
RADIO DISPATCH PRODUCTS

Application Guide

Sprint Direct Connect Interface for IP-224

VOIProven

TELEX
Radio Dispatch

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Warning

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Do not open the unit. No user serviceable parts are contained within. Bosch cannot be responsible for damage. If the unit is opened, the warranty can be voided.

Table of Contents

1.0 Introduction

SDC (Sprint[1] Direct Connect[1]) is a service provided by Sprint. The SDC interface is designed as an add-on option in the Telex Radio Dispatch system. This application guide describes the Telex Radio Dispatch SDC interface feature set and how to configure the interface in IP-224 and C-Soft.

NOTE: SDC only works with C-Soft Dispatch Software and does not work with hardware dispatch consoles.

2.0 Hardware Requirements

- AdvanceBridge from AdvanceTec (SDC device)
- IP-224 to AdvanceBridge Interface Cable from AdvanceTec
- IP-224 Ethernet Adapter Panel

3.0 Software Requirements

- Windows XP Service Pack 3
- Windows 7 (32-bit or 64-bit)
- Telex Software Manager (TSM)
- IP-224 web application Version 1.300 or later
- SDC Interface Access Key (IP-224 option)
- C-Soft Version 6.500 or later

1.“Copyright Notice” on page 2

4.0 Features

The Telex Radio Dispatch SDC interface supports the following features:

- Supports up to 60 lines of SDC operation per console.
- Displays serial connection status between AdvanceBridge and IP-224 Ethernet Adapter Panel. For more ‘information, see “IP-224 Setup” on page 8.
- Displays and aliases incoming caller ID information.
- Make and receive Team DC (predefined group) calls. For more information, see “Making TeamDC Calls” on page 26.
- Make and receive Direct Connect (private) calls. For more information, see “Making Direct Connect Calls” on page 26.
- Make and receive Call Alerts. For more information, see “Making Call Alerts” on page 27.
- Can crosspatch SDC lines with other SDC lines, Telex lines, phone lines, and SIP phone lines.

5.0 SDC Interface Access Key

The SDC Interface is an additional option on the IP-224.

NOTE:

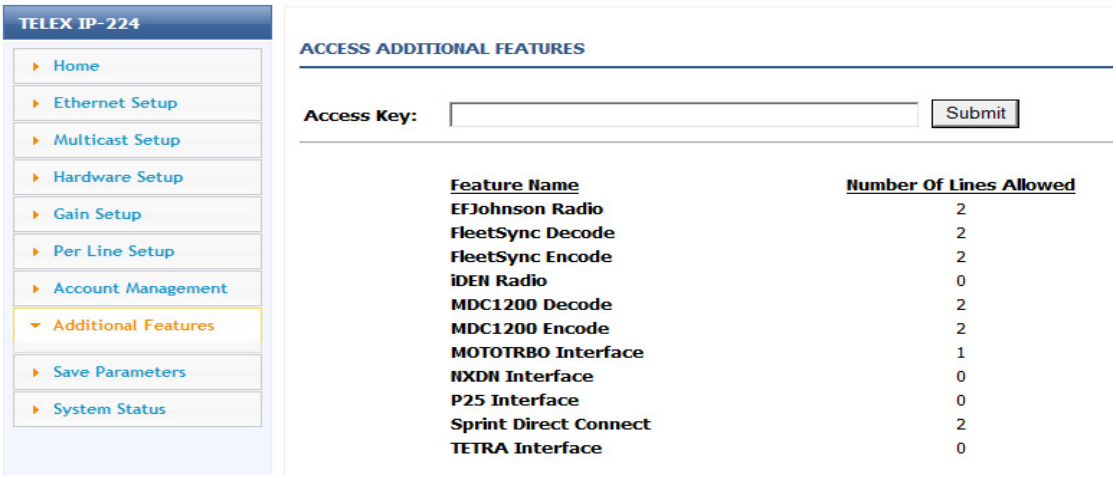
- SDC interface access key(s) are sold on a per line basis and must be purchased before you can activate the interface. SDC requires an access key generated specifically for the IP-224 Ethernet Adapter Panel it is connected to.
- If the access key was purchased as a factory installation [SDC@PI (Factory installed)] the access key was activated by the factory prior to shipping the IP-224.
- Activating the SDC Interface via the IP-224 web application is only required if this is a field installation [SDC@Field (Customer purchase option)].

Activating the SDC Interface

To **activate the SDC interface**, do the following:

1. Open the **IP-224** web application.
2. From the left navigation, select **Additional Features**.
   The Additional Features page appears.
3. In the Access Key field, enter the **32-character access key**.

4. Click the **Submit** button.
   The Access key is submitted and the newly-enabled feature's line count is updated.



5. From the left navigation, select **Save Parameters**.
6. Click the **Save Parameters** button.
   Changes are now permanently saved to the IP-224 console.

6.0 AdvanceBridge Setup

The AdvanceBridge from AdvanceTec is a wireless CDMA QC cellular serial data radio modem. The AdvanceBridge and interface cable are provided by AdvanceTec.

To **connect an IP-224 Ethernet Adapter panel to the AdvanceBridge,** do the following:

1. Connect the **IP-224 Ethernet Adapter Panel to the AdvanceBridge using the interface cable**. For more information, see the Sprint Direct Connect Quick Start Guide (F.01U.298.342).
2. Plug the **power cable** to power on the AdvanceBridge.
   The power LED is solid green when it connects to the IP-224.
3. Open the **TSM** application.
4. Update the **firmware** on the IP-224 Ethernet Adapter Panel with the IP224_v1300.tfb file or later.
   The firmware updates.

7.0 IP-224 Setup

Features

- Supports the SDC interface via the AdvanceBridge from AdvanceTec.
- Displays the status of the **RQCC** (Remote QChat Client Controller) Agent application on the System Status web page and on the IP-224 Ethernet adapter panel front panel.

  NOTE: The RQCC Agent is a software application running on the SDC device and is responsible for sending and receiving QChat messages between the SDC device and IP-224.
- Ability to reset the AdvanceBridge from the IP-224 web application. For more information, see “Reset AdvanceBridge Button” on page 15.
- Ability to display the **RSSI** (Received Signal Strength Indication) of the AdvanceBridge on the System Status web page.

  NOTE: The RSSI is not updated in real time. The value is only captured when the AdvanceBridge is powered on or reset. For more information, see “RSSI” on page 15.
- Ability to adjust the AdvanceBridge’s receive audio volume levels. For more information, see “Calibrate Volume Button” on page 15.

Configuring the SDC Interface in IP-224.

The SDC interface is only supported in IP-224 firmware version 1.300 or later.

NOTE: For earlier versions of IP-224 firmware use the TSM application to upgrade the IP-224. For more information, see Telex System Manager Technical Manual (F.01U.261.900).

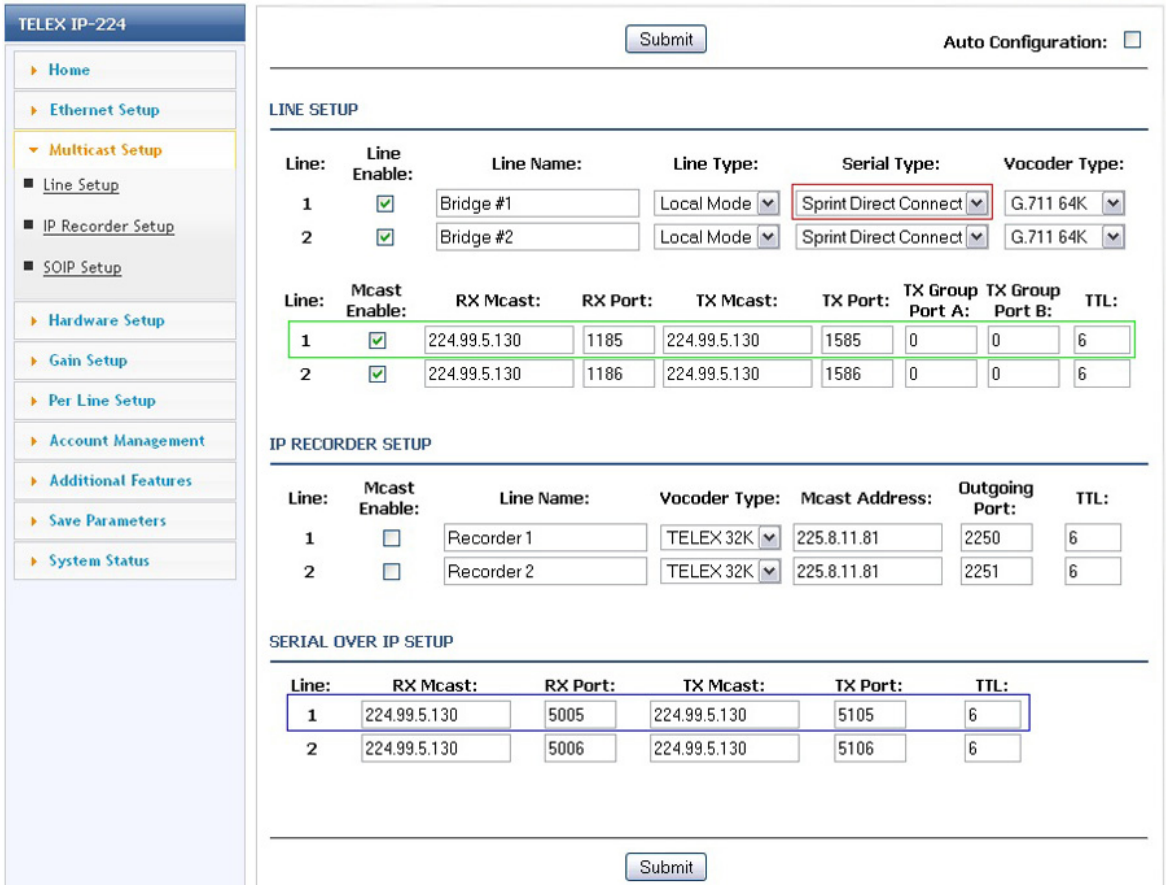
To **configure the SDC Interface**, do the following:

1. Open the **IP-224** web application.
   The IP-224 page appears.

2. Confirm the **IP-224 firmware version**.
   The firmware version displays 1.300 on the webpage.

Multicast Setup

1. From the left navigation, select **Multicast Setup**.
   The Multicast Setup page appears.
2. Click **Line Setup**.
   The Line Setup page appears.



Under LINE SETUP

The Line Multicast Setup is used to transport audio between the IP-224 and C-Soft Runtime. This Multicast Setup must match the Multicast Setup in C-Soft Designer's Per Line Parameters window.

1. From the Serial Type drop down menu, select **Sprint Direct Connect**.
2. Select the **Mcast Enable** check box.
3. In the RX Mcast field, enter the **Receive Multicast IP Address**.
4. In the RX Port field, enter the **Receive Multicast port number**.
5. In the TX Mcast field, enter the **Transmit Multicast IP Address**.
6. In the TX Port field, enter the **Transmit Multicast Port number**.
7. In the TX Group Port A field, enter the **Transmit Group Port A number** (Optional).
8. In the TX Group Port B field, enter the **Transmit Group Port B number** (Optional).
9. In the TTL field, enter the **number of routers** the Multicast audio packets go through before being discarded. Network design dictates this value.

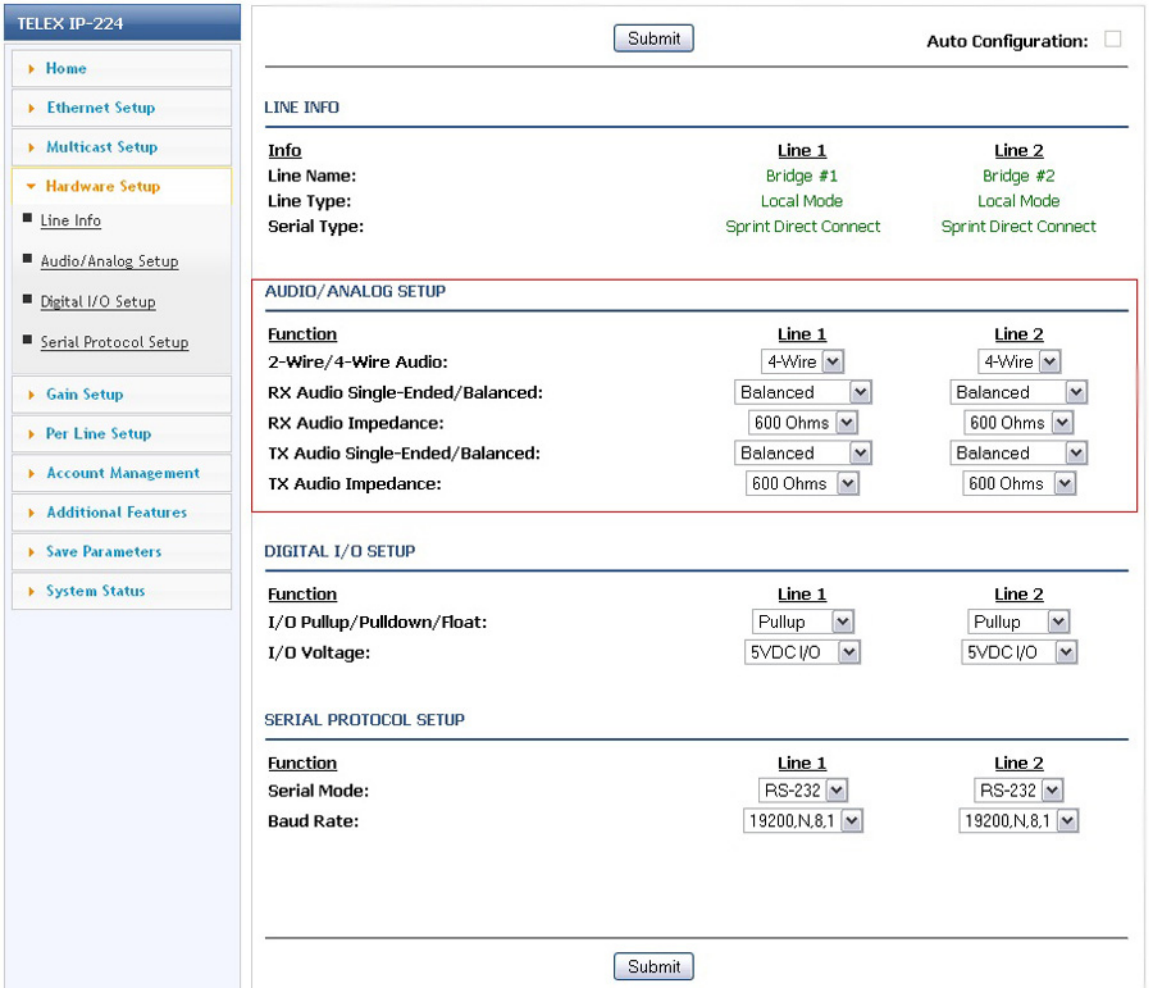
Under SERIAL OVER IP SETUP

The SOIP Multicast Setup is used to transport the command and control data between the IP-224 and C-Soft Runtime. The SOIP Multicast Setup in the IP-224 must match the line's SOIP Multicast settings located in Signaling Setup section of C-Soft Designer.

1. In the RX Mcast field, enter the **Receive Multicast IP Address**.
2. In the RX Port field, enter the **Receive Multicast Port number**.
3. In the TX Mcast field, enter the **Transmit Multicast IP Address**.
4. In the TX Port field, enter the **Transmit Multicast Port number**.
5. In the TTL field, enter the **number of routers** the Multicast audio packets go through before being discarded. Network design dictates this value.

Hardware Setup

1. From the left navigation, select **Hardware Setup**.
   The Hardware Setup page appears.
2. Click **Audio/Analog Setup**.
   The Audio/Analog Setup page appears.



Under AUDIO/ANALOG SETUP

If the Auto Configuration check box from the Multicast Setup window is selected, the IP-224 automatically configures the hardware. The user may also manually set the hardware parameters for special requirements determined by the installation.

The fields automatically set are:

- 2-Wire/4-Wire Audio: 4-Wire
- RX Audio Single-Ended/Balanced: Balanced
- RX Audio Impedance: 600 Ohms
- TX Audio Single-Ended/Balanced: Balanced
- TX Audio Impedance: 600 Ohms

Under SERIAL PROTOCOL SETUP

If the Auto Configuration check box from the Multicast Setup window is selected, the IP-224 automatically configures the hardware. The user may also manually set the hardware parameters for special requirements determined by the installation.

The fields automatically set are:

- Serial Mode: RS-232
- Baud Rate: 19200,N,8,1

Gain Setup

1. From the left navigation, select **Gain Setup**.
   The Gain Setup page appears.

2. Click **RX/TX GAINS**.
   The RX/TX Gains page appears.

Under RX/TX GAINS

If the Auto Configuration check box from the Multicast Setup window is selected, the IP-224 automatically sets default gain levels. The user may also manually adjust gain levels for special requirements determined by the installation.

The fields automatically set are:

- RX Input: 10.5 dB
- TX IP Input: 3 dB
- TX Monitor Input: 0 dB
- TX Output: 0 dB

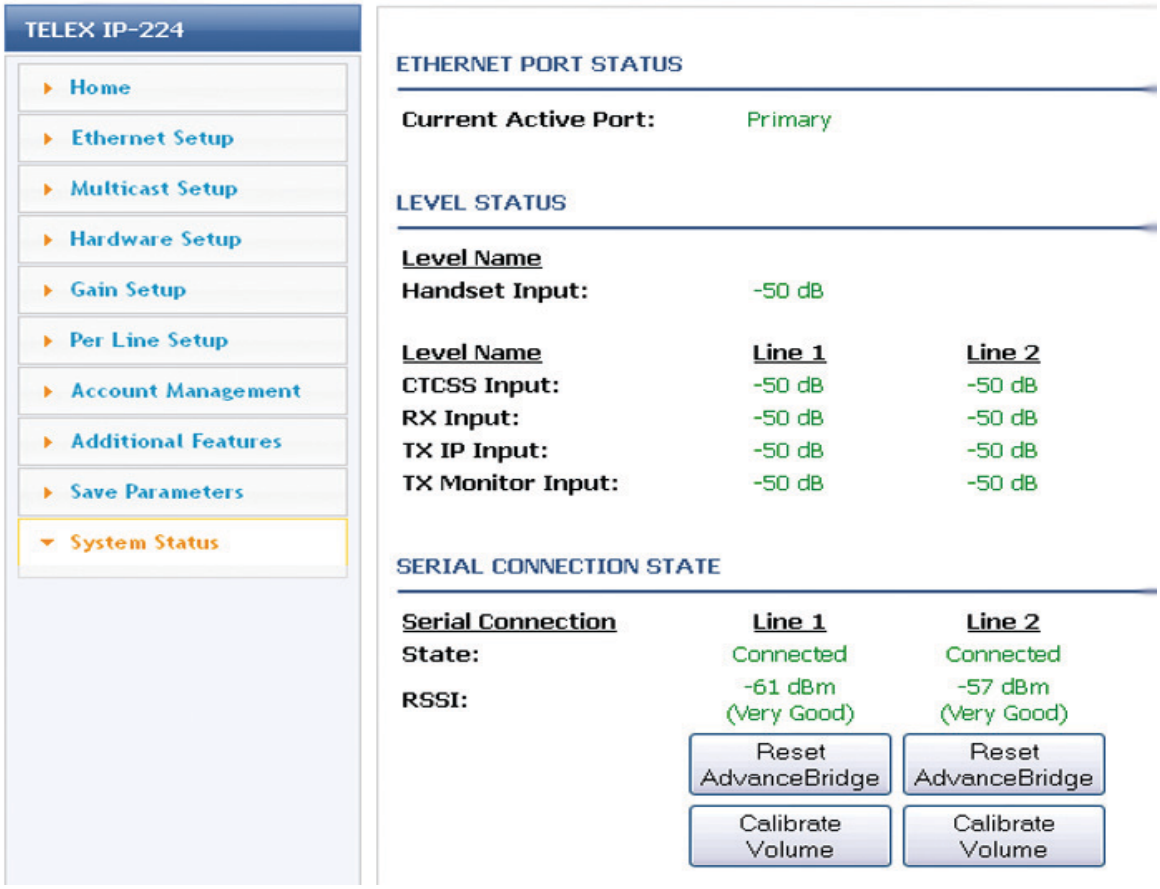
Under Save Parameters

1. From the left navigation, select **Save Parameters**.
   The Save Parameters page appears.
2. Click the **Save Parameters** button.
   Changes are now permanently saved to the IP-224 console.
3. Verify the l**ine name is displayed on the front panel** of the IP-224.

NOTE: If the IP-224 is able to establish a connection to the SDC device, the IP-224's front panel displays the line name. If the IP-224 is not able to establish a connection to the SDC device, the IP-224's front panel displays *No Serial*. For more information, see "Why does the IP-224 display No Serial on the front panel where the line name is usually displayed?" on page 29.

Under System Status

> From the left navigation, select **System Status**.
The System Status page appears.



Under SERIAL CONNECTION STATE

> Verify the Serial Connection State displays **Connected**.
The current connection status is shown in the Serial Connection State field.

Serial Connection State

The **Serial Connection State** indicates if the RQCC agent is detected by the SDC device. If the RQCC agent is detected, *Connected* is displayed as the status. If no connection is detected, *Disconnected* is displayed.

NOTE:

- RQCC Agent is a software application running on the SDC device and is responsible for sending and receiving QChat messages between the SDC device and the IP-224.
- If the IP-224 is able to establish a connection to the SDC device, the IP-224's front panel displays the line name.
- If the IP-224 is not able to establish a connection to the SDC device, the IP-224's front panel displays *No Serial*. For more information, see "Why does the IP-224 display No Serial on the front panel where the line name is usually displayed?" on page 29.

RSSI

The **RSSI** (Received Signal Strength Indication) is a measurement of the power present in a received radio signal. An RSSI level of at least -85 is recommended, although RSSI levels of >-80 are preferred.

TABLE 1. RSSI Levels

Test	Text Color	RSSI Minimum Value (dBm)	RSSI Maximum Value (dBm)
Very Good	Green	-80	-51
Good	Blue	-85	-81
Marginal	Orange	-90	-86
Poor/Unacceptable	Red	-113	-91
Unable to Read	Red	NA	NA

Reset AdvanceBridge Button

The **Reset AdvanceBridge** button is used to reboot the AdvanceBridge wireless CDMA QC cellular serial data radio modem.

To **reset the AdvanceBridge**, do the following:

> Click the **Reset AdvanceBridge** button. 

The AdvanceBridge restarts. The reset takes approximately two (2) minutes.

Calibrate Volume Button

The **Calibrate Volume** button is used to adjust the AdvanceBridge's volume level.

To **calibrate the volume**, do the following:

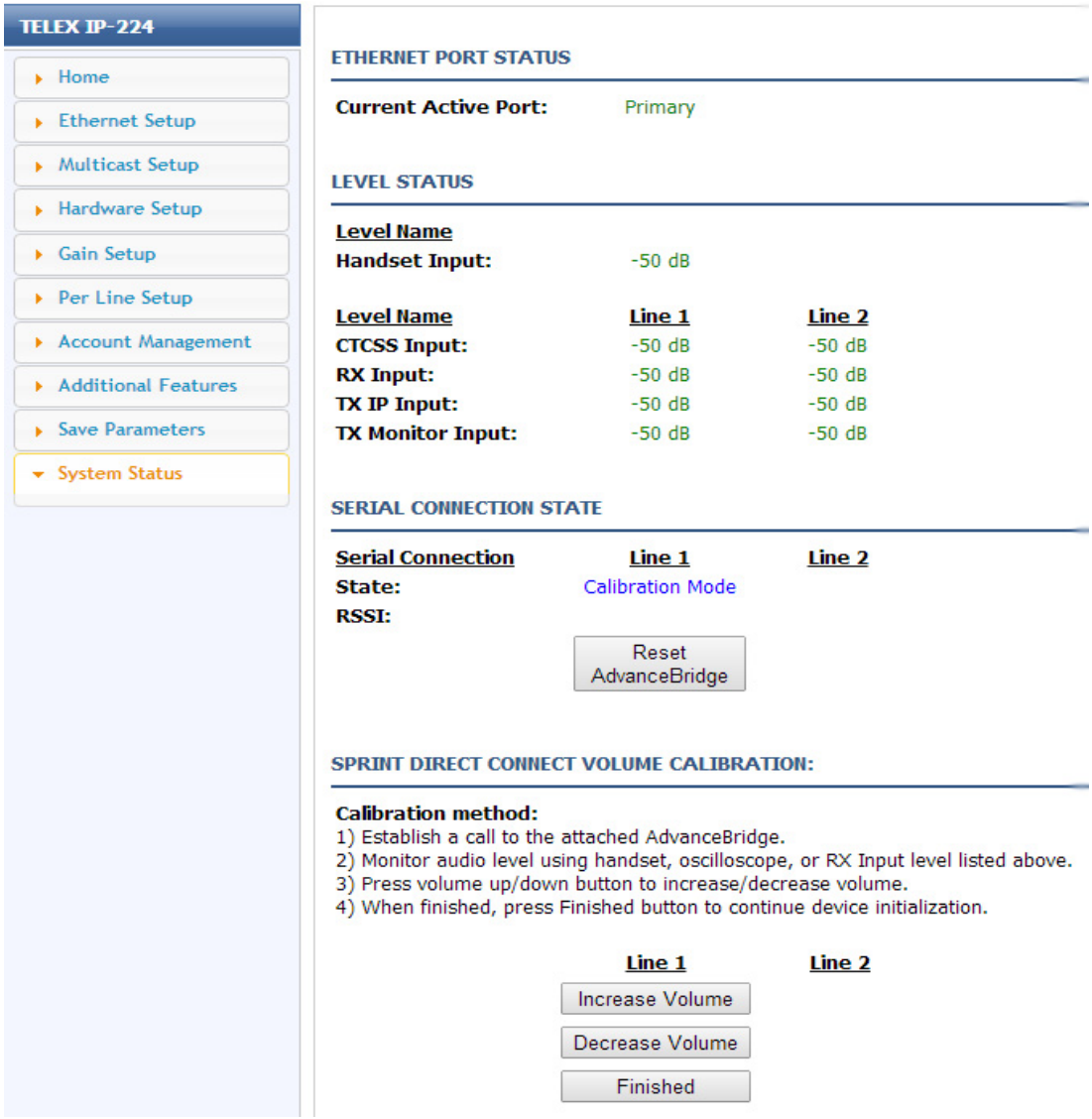
> Click the **Calibrate Volume** button. 

The AdvanceBridge device enters Calibration Mode.

Under SPRINT DIRECT CONNECT VOLUME CALIBRATION:

Calibration method:

1. Establish a call to the attached AdvanceBridge.
2. Monitor audio level using handset, oscilloscope, or RX Input level listed above.
3. Press volume up/down button to increase/decrease volume.



4. When finished, press Finished button to continue device initialization.
   The Serial Connection State displays the connection status.

NOTE: The AdvanceBridge does not display volume level.

REFERENCE: For more information, see IP-224 Technical Manual (F.01U.218.562).

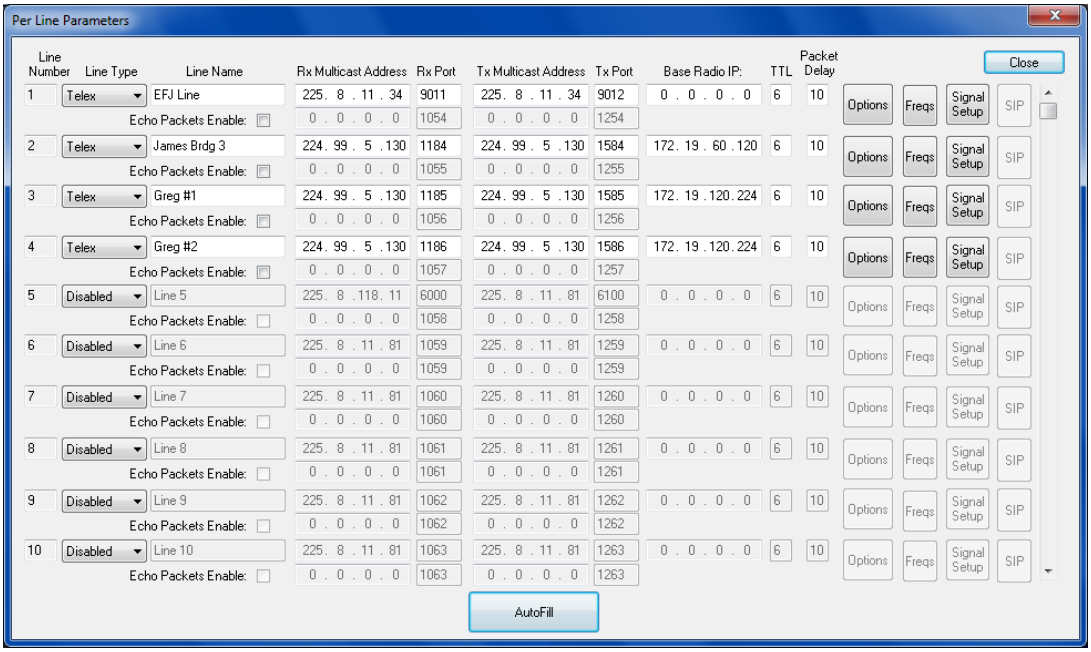
8.0 C-Soft Designer

SDC interface is only supported in C-Soft version 6.500 or later. For more information, see C-Soft Software Console Administrator's Guide (F.01U.218.561).

Configuring SDC Interface in C-Soft

To **configure the line for Sprint Direct Connect type**, do the following:

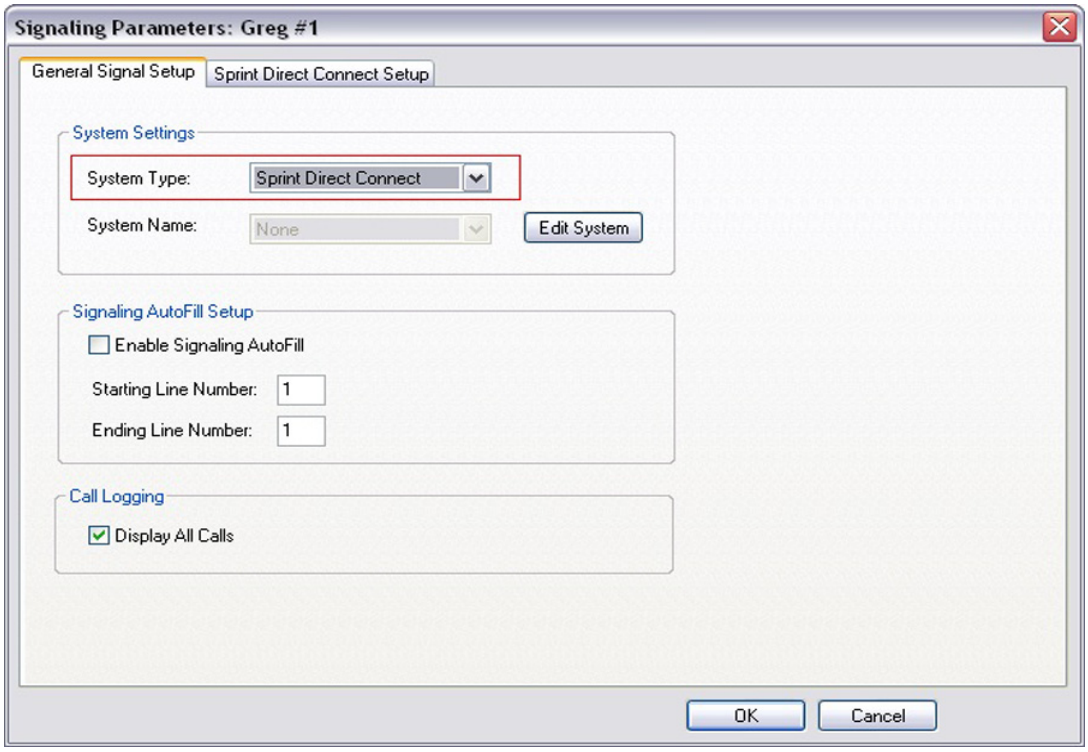
1. Open **C-Soft Designer**.
2. From the Edit menu, select **Setup Per Line Parameters**.
   The Per Line Parameters window appears.



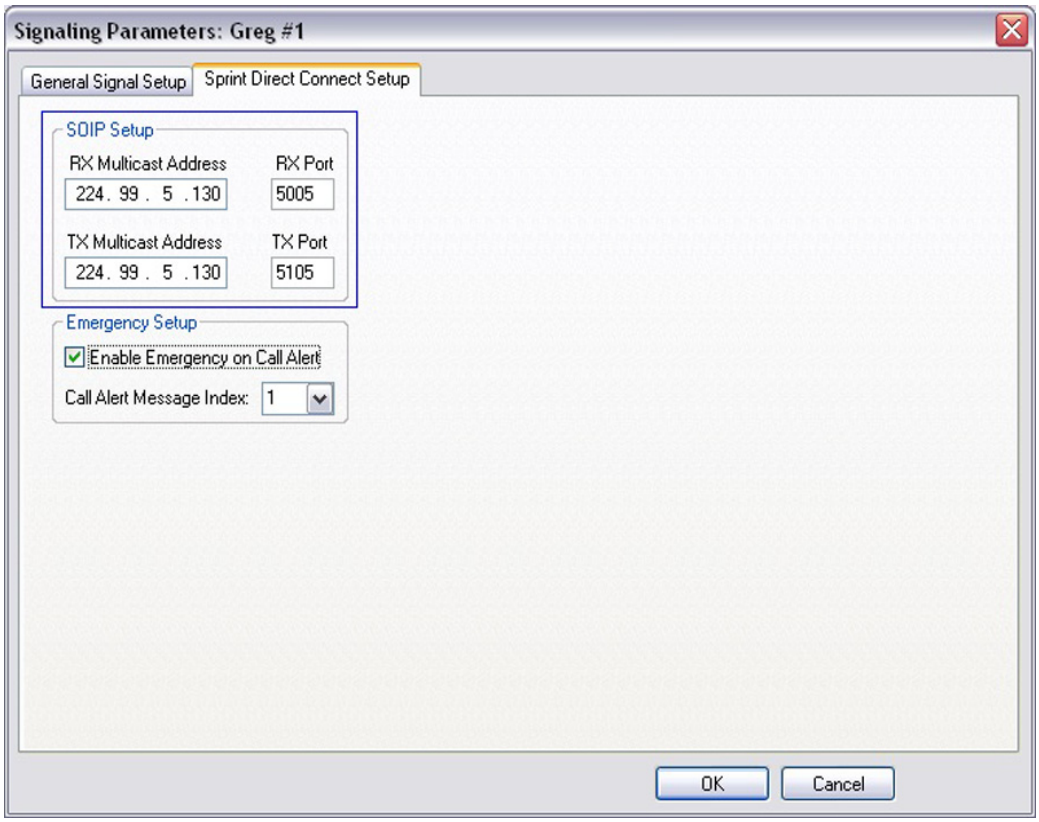
NOTE: The line's Multicast information must match the Line Setup Multicast settings in the IP-224 web application.

3. From the Line Type drop down menu, select **Telex**.
4. Click the **Signal Setup** button. 
   The Signaling Parameters window appears.

5. From the System Type drop down menu, select **Sprint Direct Connect**.
The Sprint Direct Connect Setup tab appears.



6. From the System Name drop down menu, select **system** for the line.



In the SOIP Setup Group Box

NOTE: The SOIP Setup information must match the Serial Over IP setup information in the IP-224 web application.

7. In the RX Multicast Address field, enter the **Receive Multicast Serial Over IP Address**.
8. In the RX Port field, enter the **Receive Multicast Serial Over IP Port number**.
9. In the TX Multicast Address field, enter the **Transmit Multicast Serial Over IP Address**.
10. In the TX Port field, enter the **Transmit Multicast Serial Over IP Port number**.
11. Click the **OK** button.
    The Signaling Parameters are saved.

Emergency Setup Group Box

Enable Emergency on Call Alert Check Box

The **Enable Emergency on Call Alert** check box enables C-Soft to treat incoming SDC call alerts containing the message index specified in the Call Alert Message Index field as an Emergency. C-Soft plays emergency alert tones, performs the Emergency button flash actions on the receiving line's Select button and creates an entry in the Active Emergency window.

Call Alert Message Index Drop Down Menu

The **Call Alert Message Index** drop down menu is used to select the Call Alert message triggered by an Emergency in C-Soft. The Sprint Direct Connect handsets contain 21 preset Call Alert Messages.

TABLE 2. Default Call Alert Messages

Status Message	Status ID
<no message>	0
Can’t talk right now	1
Will call you back	2
I’m in a meeting	3
Call me	4
Direct Connect me	5
Yes	6
No	7
Where are you?	8
Let’s get lunch	9
The meeting has been cancelled	10
I’ll be there shortly	11
I love you	12
Meeting still on?	13
Are you free?	14
Please stop by	15
Can I call you?	16
In the office?	17
On my way	18
Need help	19
Where you at?	20

To **configure Emergency Setup**, do the following:

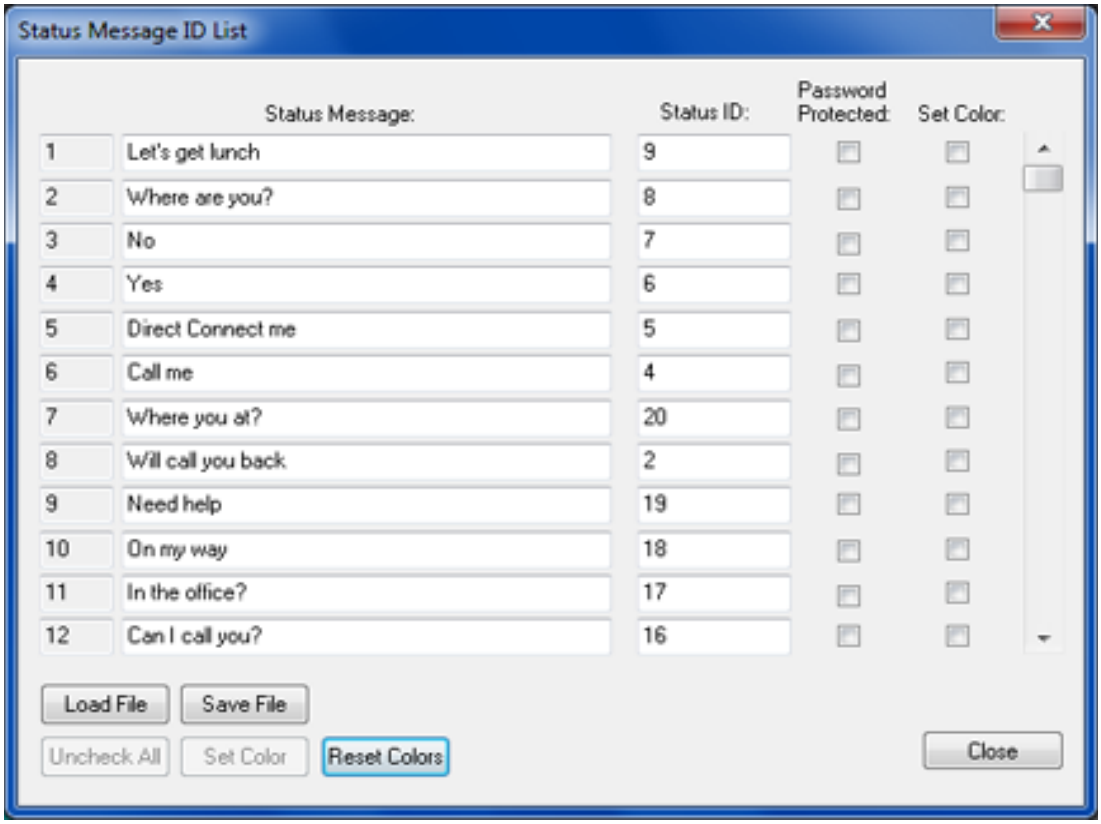
1. Select the **Enable Emergency on Call Alert** check box.
2. From the

8.1 Editing Call Alert Messages

To **edit Call Alert Messages,** do the following:

1. Open **C-Soft Designer**.

2. From the Edit menu, select **Edit Status Message ID List**.
   The Status Message ID List appears.



3. In the Status Message field, enter the **status message** from Table 2 you want to use. For more information, see Table 2 on page 20.
4. In the Status ID field, enter the corresponding Status ID.

NOTE: The SDC product does not have a specific emergency function like the NEXTEL/ iDEN product. Specify Call alert messages to trigger Emergency actions in C-Soft. For more information, see “Emergency Setup Group Box” on page 19.

8.2 Frequency Setup

Call Types and Destination numbers are configured on the Frequency Setup page located on the Per Line Parameters window.

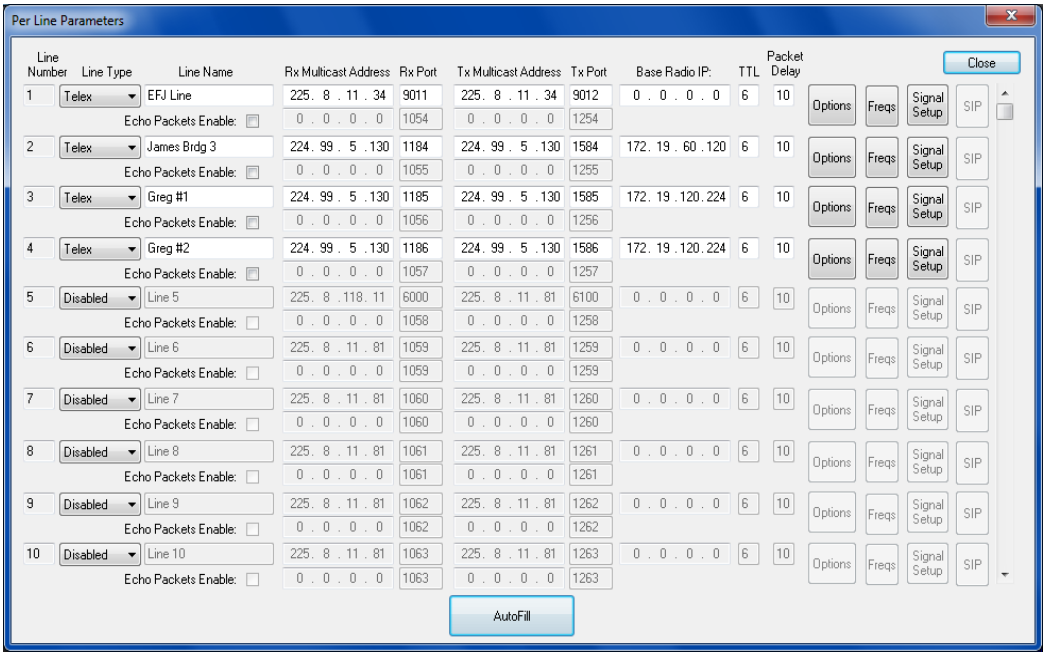
Frequency 1 can be configured for Last Call operation. When Last Call is selected as the call type, the console responds to the last user or group who called on the line.

All other frequencies can be configured for any of the three (3) call types:

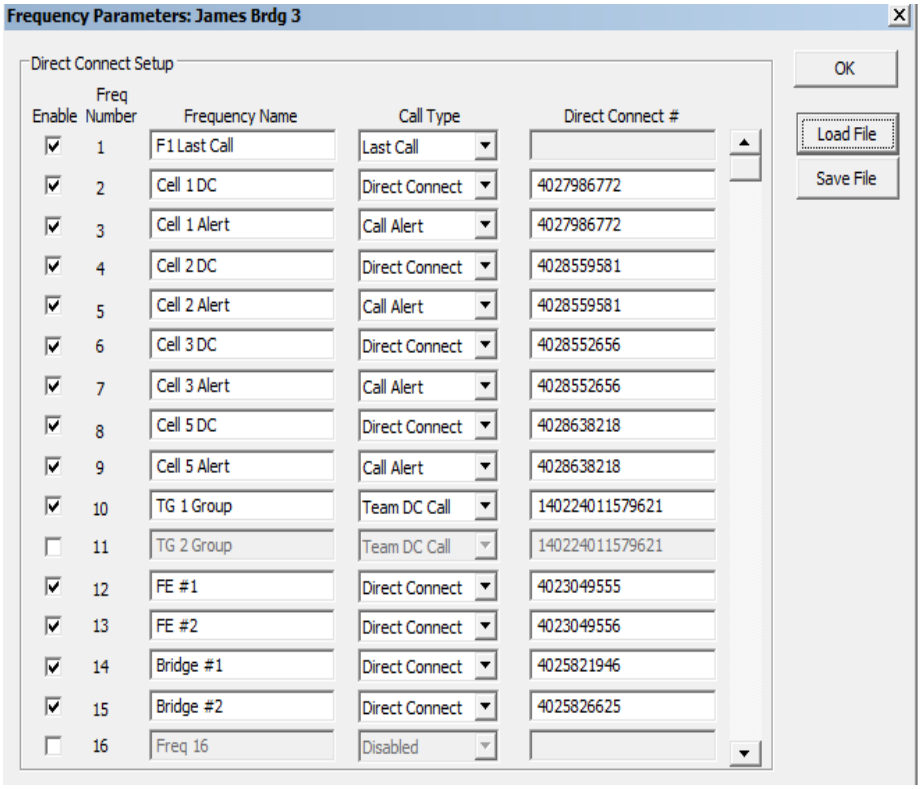
- Direct Connect
- TeamDC
- Call Alert

To **set up Direct Connect Frequency parameters**, do the following:

1. Open **C-Soft Designer**.
2. From the Edit menu, select **Setup Per Line Parameters**.
   The Per Line Parameters window appears.



3. Click the **Freqs** button.
   The Frequency Parameters window appears.



In the Direct Connect Setup Group Box

4. Select the **Enable** check box.
5. In the Frequency Name field, enter the **frequency name**.
6. From the Call Type drop down menu, select the **call type**.

NOTE: Only one (1) frequency can be enabled for a TeamDC call type.

7. In the Direct Connect # field, enter the **direct connect number**.

NOTE: A TeamDC number is 15 digits and an individual number is 10 digits.

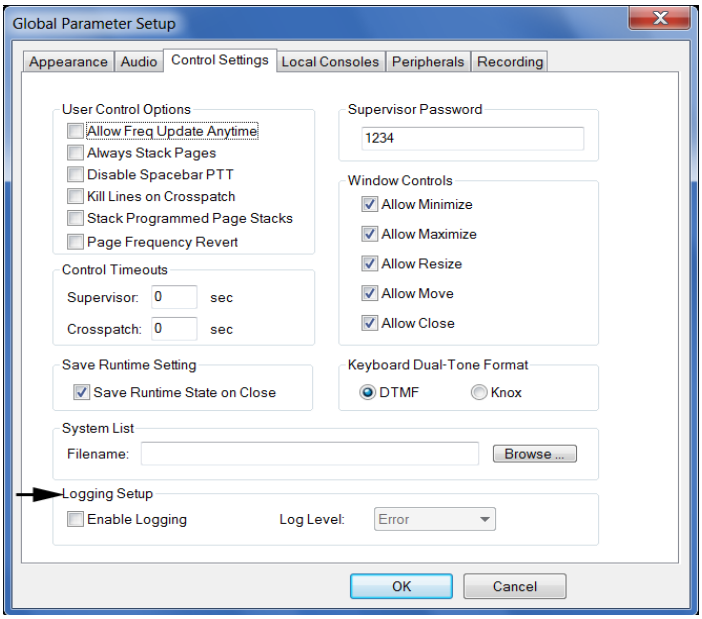
8. Click the **Close** button.
   The Frequency Parameters are saved.
9. Add the desired **Per Line buttons** for the newly configured line. For more information, see C-Soft Software Console Administrator's Guide (F.01U.218.561).
10. Save the **.veg** file in C-Soft Designer.

8.3 System Log

The **System Log** feature records system activities which occur on the system and can be used to assist in troubleshooting system performance.

Logging Setup Group Box

The **Logging Setup** group box is located in Edit | Setup Global Parameters | Control Settings.



Enable Logging Check Box

The **Enable Logging** check box indicates logging is active and the console creates an event log file when C-Soft Runtime is started.

By default the Enable Logging check box is not selected.

If the Enable Logging check box is selected a log file is created. The location of the log file is dependant on the computer's operating system.

Windows XP: *C:\Documents and Settings\All Users\Application Data\Telex Communications\logs_folder*

Windows 7: *C:\ProgramData\Telex Communications\logs_folder*

NOTE: The log file is named, SystemLog_[Date][Time]_[.veg file name].txt. For example, a system log started on June 3rd at 1:05 PM from the Denton Fire.veg file is named, *SystemLog_06-03 13:05:13_Denton Fire.txt*. A new file is created anytime C-Soft Runtime is started or when the current log file reaches a file size of 3 Mb.

Event log files are kept for at least seven (7) days. C-Soft deletes any files older than seven (7) days at boot-up or when creating a new event log file because the existing file has reached its maximum size.

Log Level Drop Down Menu

The **Log Level** drop down menu is used to select what type of messages to be saved in the event log file and the event log window, if available.

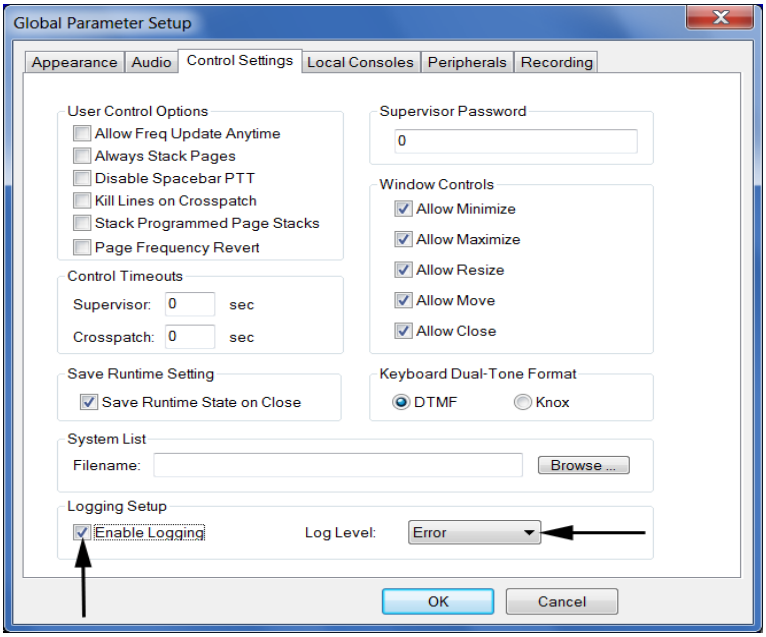
Available options are:

Error –	Used for events that could cause or indicate a service failure. (Default).
Warning –	Used for minor user-level exceptions not expected during normal operation.
Information –	Used for normal user-level events (for example, incoming calls, starting ac all, etc.).
Debug –	Used for debugging purposes.

Configure Logging Setup

To **configure Logging Setup**, do the following:

1. Open **C-Soft Designer**.
2. From the Edit menu, select **Setup Global Parameters**.
   The Global Parameters Setup window appears.
3. Select the **Control Settings** tab.
   The Control Settings page appears.



4. Select the **Enable Logging** check box.
5. From the Log Level drop down menu, select a **Log Level**.
6. Click the **OK** button.
7. Save the **.veg** file in C-Soft Designer.

REFERENCE: For more information, see C-Soft Software Console Administrator's Guide (F.01U.218.561).

9.0 C-Soft Runtime

To **confirm C-Soft Runtime is connected**, do the following:

1. Open **C-Soft Runtime**.
2. Verify the **buttons associated with a Sprint Direct Connect line are enabled**.
   The system is now ready to make and receive calls on the SDC Network.

NOTE:

- C-Soft Runtime initially displays *Disconnected from SDC device on Line X* and Line X's per line buttons are disabled. Once C-Soft receives confirmation the RQCC agent is running on the AdvanceBridge, *Connected to SDC Device on Line X* displays on status bar and line's buttons are enabled.
- If the AdvanceBridge's QChat Service status is off-line, the configured line in C-Soft Runtime is disabled and an icon indicating *NO SRVC* is displayed on the line's Select button.

9.1 Displaying RQCC Agent Status

C-Soft Runtime enables the per line buttons associated to a SDC line once the RQCC Agent on the AdvanceBridge is initialized. If the connection to the RQCC agent is lost, C-Soft Runtime disables the line's buttons.

9.2 Making TeamDC Calls

To **make a TeamDC (predefined group) call**, do the following:

1. Select the corresponding **frequency button**.
2. Click the **InPTT** button.
   OR
   Click the **Main PTT** button.

NOTE: Another option is to initiate TeamDC calls by using the PTT-Group Call button and the Keypad control.

9.3 Making Direct Connect Calls

To **make a Direct Connect (private) call**, do the following:

1. Select the corresponding **frequency** button.
2. Click the **InPTT** button.
   OR
   Click the **Main PTT** button.

NOTE: Another option is to initiate Direct Connect calls by using the PTT-Private Call button and the Keypad control.

9.4 Making Call Alerts

To **make Call Alerts**, do the following:

1. Select the corresponding **frequency** button.
2. Click the **InPTT** button.
   OR
   Click the **Main PTT** button.

NOTE: Another option is to initiate Call Alerts by using the keypad control and either the Radio Call Alert or Radio Status button.

- The Radio Call Alert button sends a Call Alert with no message text.
- The Radio Status button sends a Call Alert with the selected message text.

9.5 Updating Frequency buttons based on incoming caller ID and call type

- Upon receiving a TeamDC call, if a frequency has been configured for a TeamDC call matching the incoming Team DC's number, C-Soft automatically changes to the matching frequency.
- Upon receiving a DC call, if a frequency has been configured for a DC call matching the incoming DC's number, C-Soft automatically changes to the matching frequency.
- Upon receiving a call alert, if a frequency has been configured for a call alert matching the incoming Call Alert's number, C-Soft automatically changes to the matching frequency.

NOTE: If a frequency button cannot be found, the Frequency 1 (F1 Last Call) is selected, if configured.

9.6 Per Line Call History Window

The **Per Line Call History** window is used to display received calls and call alerts. In addition, the Per Line Call History window is used to initiate either a voice call or a call alert.

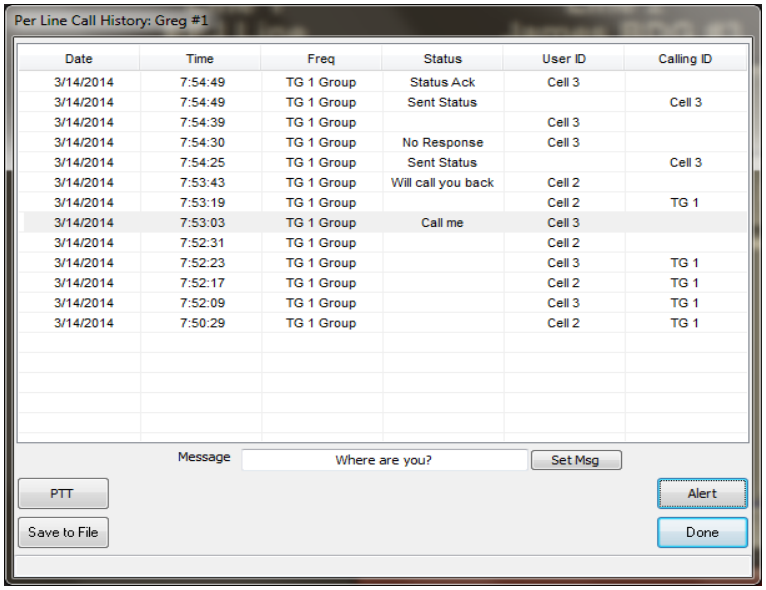
To **initiate either a voice call or a call alert**, do the following:

1. Select an **entry** in the Per Line Call History window.

2. Click the **PTT** button.
   OR
   Click the **Alert** button.

NOTE:

- Call Alerts can only be sent to individuals.
- A TeamDC Call is initiated when responding back to a group and a Direct Connect call is initiated when responding back to an individual.



REFERENCE: For more information, see C-Soft Software Console Administrator's Guide (F.01U.218.561).

10.0 Compatibility

Compatible with ADHB-4 Version 2.100 or later.

Compatible with IP-224 Version 1.300 or later.

Compatible with C-Soft Version 6.500 or later.

11.0 Frequently Asked Questions

Why does the IP-224 display *No Serial* on the front panel where the line name is usually displayed?

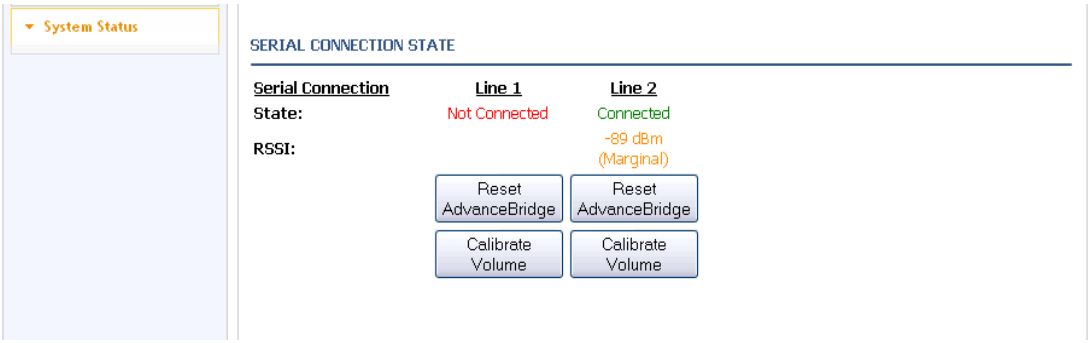
- The **IP-224** displays *No Serial* if either the IP-224 is not connected to the AdvanceBridge, or if the AdvanceBridge device is not ready for operation. For more information, see “AdvanceBridge Setup” on page 7.
- When an **IP-224** and **AdvanceBridge** are connected, the IP-224 begins an initialization process to prepare the AdvanceBridge for operation. Once the IP-224 confirms the AdvanceBridge is running and responding to requests, the IP-224 changes to a serial connection state of *Connected* and displays the line name on the IP-224’s front panel.
- In a normal operating state, the **IP-224** displays the line name and a serial connection status of *Connected*. For more information, see “Serial Connection State” on page 14.

How can I remotely verify the connection status between the IP-224 and the AdvanceBridge?

1. From the left navigation, select **System Status**.
   The System Status page appears.

Under SERIAL CONNECTION STATE

2. Verify the Serial Connection State displays, **Connected**.
   The current connection status displays in the Serial Connection State field.



For more information, see “Serial Connection State” on page 14.

Why are the per line buttons disabled for a line configured for SDC?

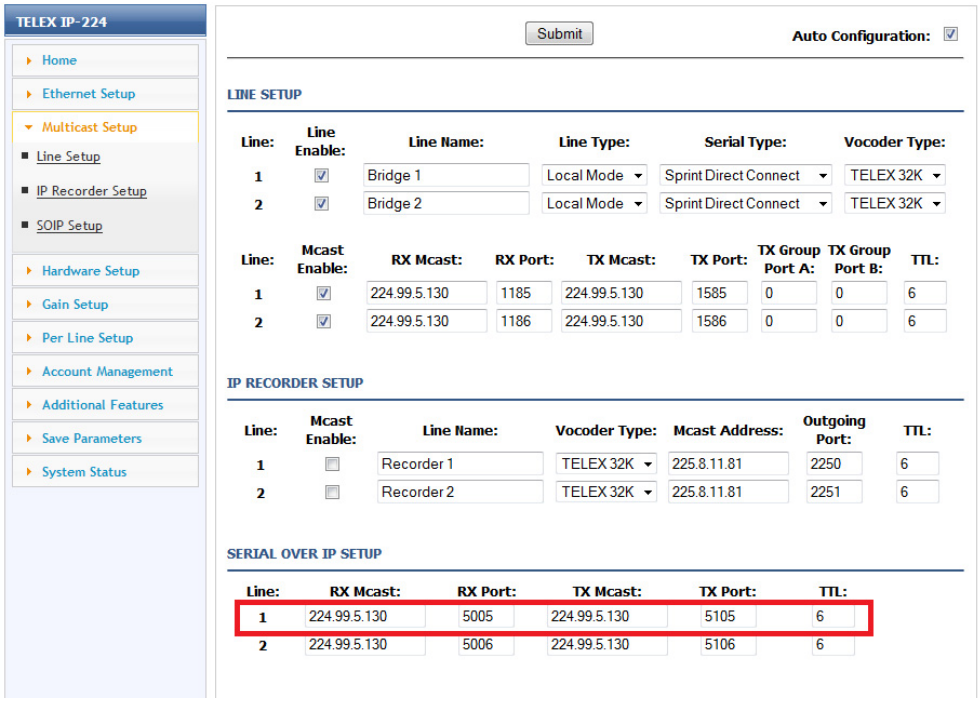
Disabled buttons on a SDC line indicate the console is unable to confirm serial communications between the IP-224 and the AdvanceBridge.

Possible causes of this condition are:

- The **AdvanceBridge/IP-224 interface cable** is not connected to one (1) or both devices.
  Solution: Connect the interface cable to both the AdvanceBridge and the IP-224. For more information, see "AdvanceBridge Setup" on page 7.
- The **IP-224** is not configured for a Serial Type of Sprint Direct Connect.
  Solution: Go to the Multicast Setup page on the IP-224. Set the Serial Type to Sprint Direct Connect. For more information, see "Configuring the SDC Interface in IP-224." on page 8.
- The SOIP Multicast addresses and ports do not match between **C-Soft and the IP-224**.
  Solution: Verify the Multicast addresses and ports match in IP-224 web application and C-Soft.

To **verify the Multicast addresses and ports match in IP-224 web application**, do the following:

1. From the left navigation, select **Multicast Setup**.
   The Multicast Setup page appears.



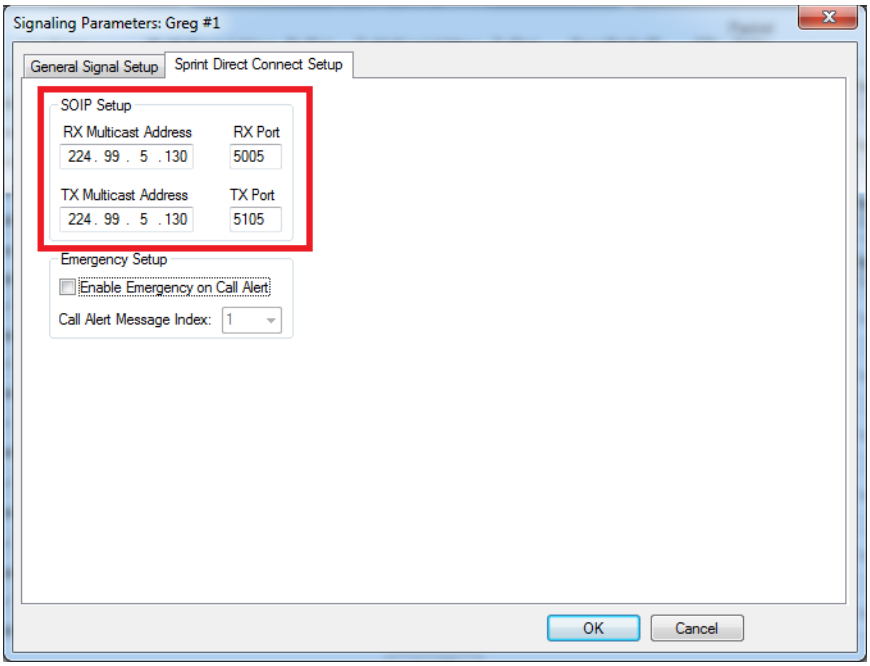
Under SERIAL OVER IP SETUP

2. Verify both **TX and RX SOIP Setup Multicast Addresses and ports match between the IP-224 and C-Soft**. For more information, see "Configuring the SDC Interface in IP-224." on page 8.

(Continued)

To **verify the Multicast addresses and ports match in C-Soft**, do the following:

1. Open **C-Soft Designer**.
2. From the Edit menu select **| Setup Per Line Parameters | Signal Setup | Sprint Direct Connect Setup**.
3. Verify both **TX and RX SOIP Setup Multicast Addresses and ports match between the IP-224 and C-Soft**. For more information, see "Configuring SDC Interface in C-Soft" on page 17.



- The **SOIP Multicast addresses and ports** are being blocked by a PC or network firewall application.
  Solution: Enable the SOIP Multicast addresses and ports in the respective firewall application.
- The **AdvanceBridge** has been reset or is restarting.
  Solution: The AdvanceBridge reset takes approximately two (2) minutes.

Why do I receive incoming audio in C-Soft, but all the per-line buttons are disabled?

The SDC interface (and other SOIP protocols) uses two (2) separate channels of communication between the C-Soft console and the IP-224.

- The **first channel** is used to transport audio over the RX and TX Multicast address and ports.
- The **second channel** is used to transport control and signaling data via the SOIP Multicast addresses and ports.
- A **console receiving only audio, but no control data** (i.e. per line buttons are disabled) indicates the SOIP Multicast addresses and ports are not setup correctly. For more information, see "Why are the per line buttons disabled for a line configured for SDC?" on page 30.

What does the No SRVC icon on the Select button mean?

The NO SRVC icon indicates the QChat service is not running on the AdvanceBridge. Possible causes are:

- **AdvanceBridge device** is not programmed for the SDC operation.
- **AdvanceBridge** has not been provisioned on the SDC system.
- **Limited RF** coverage at the AdvanceBridge site.
  Solution: Contact Sprint customer care or your Sprint sales representative.

What RSSI level is acceptable for SDC operation?

An RSSI level of at least -85 is recommended, although RSSI levels of >-80 are preferred.

To **view the RSSI level of the AdvanceBridge**, do the following:

1. Open the **IP-224** web application.
2. From the left navigation, select **System Status**.

Under LEVEL STATUS

- Verify the **RSSI level** is within the recommended value.
  Solution: If the RSSI level is lower than the recommended value, contact Sprint customer care or your Sprint sales representative.

Why does the console display *Call Failed: Invalid target address list* when transmitting from the console?

This error message is generated when C-Soft initiates a TeamDC call to a TeamDC group which is not configured in the **AdvanceBridge**.

- Verify the **Direct Connect # for the TeamDC frequency is correct in C-Soft Designer**. For more information, see “Frequency Setup” on page 21.
- The AdvanceBridge can be added to a TeamDC group through the Sprint Mobile Sync Admin software.

Why does the console display “Call Failed: No Response from SDC Device” when transmitting from the console?

- This error message is generated when C-Soft does not receive a response to a call request within the time-out period.
- After sending a call request, C-Soft waits for a response from the AdvanceBridge for up to 6500 ms.
- If a response is not received within this time, C-Soft determines the request has timed out and displays the error message *Call Failed: No Response from SDC Device*.

Why can’t more than one TeamDC call type be programmed in the Frequency Setup?

- In C-Soft Designer the frequency setup only allows one (1) TeamDC group to be configured per line.
- This prevents calls from being missed from a TeamDC group while active on a call from another TeamDC group.

Are phones with a number using * (asterisk) in the number compatible with SDC?

- No, all phones should have a numeric only, no * (asterisk) phone number.
  Solution: Contact Sprint customer care or your Sprint sales representative to change phone numbers.

Notes:

Suggestions or comments:
Contact technical support with suggestions or comments concerning this application guide.

Technical Support:

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