AVAYA

Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Telecor VS-600 Staff Call Station with Avaya IP Office – Issue 1.0

Abstract

These Application Notes describe the steps required to configure the Telecor VS-600 Staff Call Station and peripherals to interoperate with Avaya IP Office. The VS-600 Staff Call Station is a device that seamlessly integrates all the functions of a traditional nurse call system, providing instant two-way speech between residents and staff. The device is essentially an analog speaker telephone, primarily for retirement/assisted living residents to call staff; with capabilities such as programmable multiple call destination points for initial and redirection of residents calls to staff.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

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1. Introduction

These Application Notes describe the steps required to configure the Telecor VS-600 Staff Call Station and peripherals to interoperate with Avaya IP Office.

The VS-600 Staff Call Station enables easy and fast communication between residents and staff of assisted living facilities or retirement communities. All of the facility's administrative, external/internal communication needs are encompassed into one application. Using Avaya IP Office's features and functions as the core element, the VS-600 Staff Call Station and peripherals such as wired and wireless pull cords, call cords, pendants and corridor lights will provide total connectivity between residents and staff.

In addition, programmable software allows the capability to program each unit individually as a separate device to allow for the special care needs of a particular resident. Each device can be programmed for system announcements (for example, a kitchen menu or activities for the week). When the Menu or Activities buttons are pressed, the residents will hear a pre-recording announcement through the VS-600 Staff Call Station's speaker.

When a resident initiates a call on the VS-600 Staff Call Station or peripheral, the call is routed to an IP Office extension or hunt group to contact a staff member. The designated staff's telephone(s) receive the call and its LCD screen displays the type of call device, such as a pendant or call cord. The station number indentifies the location where the call originated from. When the call is answered, the resident and staff will have a two-way communication.

1.1. Interoperability Compliance Testing

The compliance testing focused on analog calls from the VS-600 Staff Call Station and peripherals to the telephones on Avaya IP Office, and redirection of those calls utilizing the features of the VS-600 Staff Call Station.

In addition to calls from the VS-600 Staff Call Station, the following peripherals were tested:

- **Wireless Pendant** - A Wireless Pendant is worn by the resident to allow them to move freely about the room and place calls without being near the VS-600 Staff Call Station.
- **Wireless Pull Station** – A Wireless Pull Station is most often installed in the resident's washroom to provide additional security.
- **Hard Wired Pull Station** – A Hard Wired Pull station can also be used in a resident washroom to provide call capabilities.
- **Bed Call Cord** – The Call Cord plugs into the VS-600 Staff Call Station, providing the convenience of being able to initiate a call remotely from the bedside.
- **Dome Light** – A Dome Light provides visual signals to nearby staff of calls originating from rooms. It's multi colored lamps and lighting patterns help to identify the call-in device, which has a designated priority level.

1.2. Support

For Telecor technical support, contact Telecor at:

- Phone: 1-800-464-3274
- E-mail: vstech@telecor.com

2. Reference Configuration

Figure 1 illustrates the Avaya IP Office configuration used during compliance testing with the Telecor VS-600 Staff Call Station and peripherals. The VS-600 Staff Call Station to Avaya IP Office via an analog port.

The Avaya IP Office solution comprised of the following equipment:

- Avaya IP Office 500 with Phone Expansion Module
- Avaya 5610SW IP Telephones (H.323 protocol)
- Avaya 2420 Digital Telephones
- Avaya 5420 Digital Telephones
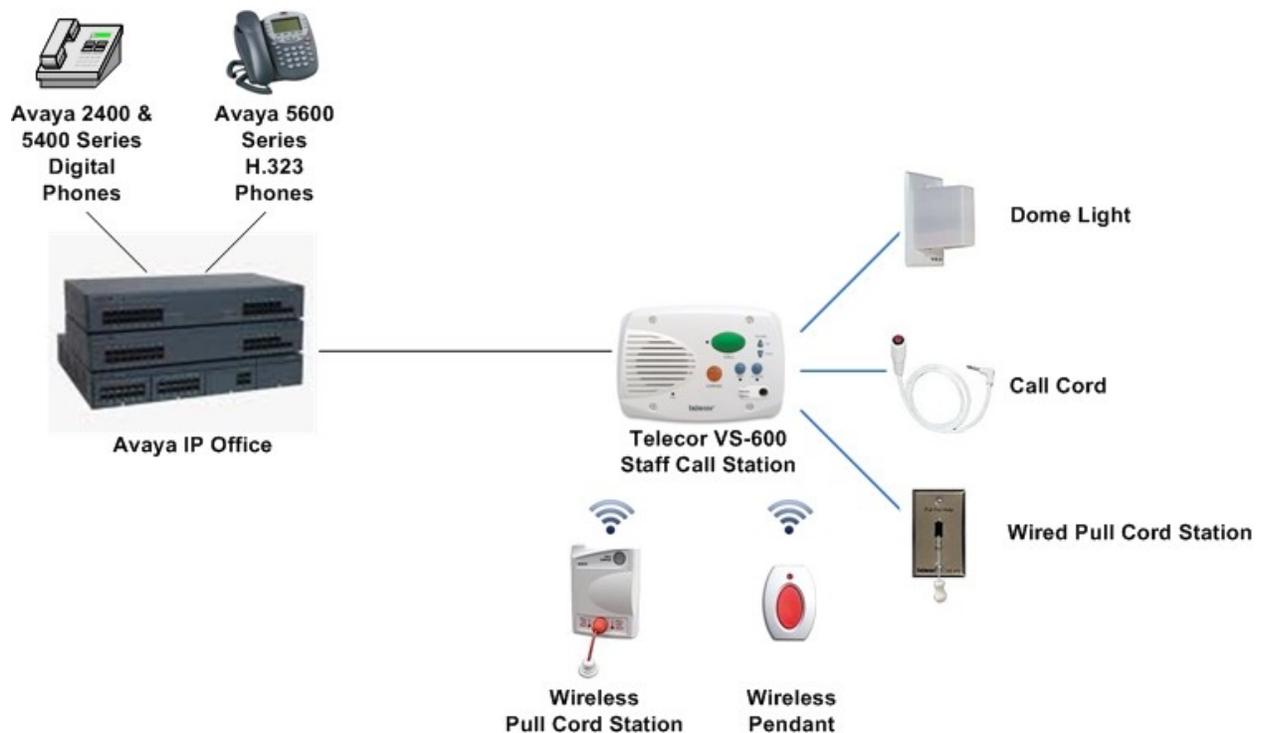
Figure 1: Avaya IP Office with Telecor VS-600 Staff Call Station and Peripherals

3. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Avaya IP Telephony Solution Components	
Equipment	**Software/Firmware**
Avaya IP Office 500	6.0 (8)
Avaya IP Office 500 Phone Expansion Module Analog POTS 30 V2	6.0 (8)
Avaya IP Office Manager (Windows PC)	6.0 (8)
Avaya IP Office Voicemail Pro	6.0 (22)
Avaya 5610SW IP Telephone (H.323)	2.9.1
Avaya 2420 Digital Telephone	R6 Firmware
Avaya 5420 Digital Telephone	R6 Firmware
Telecor Solution Components	
Equipment	**Software/Firmware**
VS-600 Staff Call Station Peripherals: • Dome Light • Wireless Pull Cord Station • Wireless Pendant • Hard Wired Pull Station • Call Cord	3.13
Resident Unit configuration software	4.52

4. Configure Avaya IP Office

This section describes the steps required for configuring Avaya IP Office to interoperate with the Telecor VS-600 Staff Call Station and peripherals.

IP Office is configured via the IP Office Manager program. Log into the IP Office Manager PC and select **Start → Programs → IP Office → Manager** to launch the Manager application. Log into the Manager application using the appropriate credentials. When configuring Avaya IP Office, click the **OK** button on each screen that was edited to save the changes.

1. *Verify Licenses.*
   Click on **License** in the left panel. Confirm that there are valid licenses for the configuration.

   In the compliance test configuration a license for the Avaya VoiceMial Pro was required as it was used to play pre-recorded announcements when the Menu and Activities buttons were pressed on the VS-600 Staff Call Station. If a required feature is not enabled or if there is insufficient capacity, contact an authorized Avaya sales representative to make the appropriate changes.

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2. *Configure VS-600 Staff Call Station Extension*.
   Select **Extension** in the left panel. Select the extension to be used for the Telecor VS-600 Staff Call Station.

   The default values were used for the Telecor VS-600 Staff Call Station analog extension. Note the **Base Extension**.

3. *Configure VS-600 Staff Call Station User*.
   Select **User** in the left panel. Right-click and select **New** or edit an existing user.

   Enter the **Base Extension** from **Step 2** above in the **Extension** field. The default values for the remaining fields may be used. The screen below shows the values used during compliance testing.

4. *Configure Hunt Groups*.
   Select **HuntGroup** in the left panel. Right-click and select **New**.

   The VS-600 Staff Call Station was configured to dial a primary hunt group extension when a call was placed from the device. As a backup, it was also configured to dial a secondary hunt group extension when the call to the primary hunt group was not answered.

   Configure the following for the primary hunt group:
   - Enter descriptive test for the **Name**.
   - Enter an available extension in the **Extension** field.
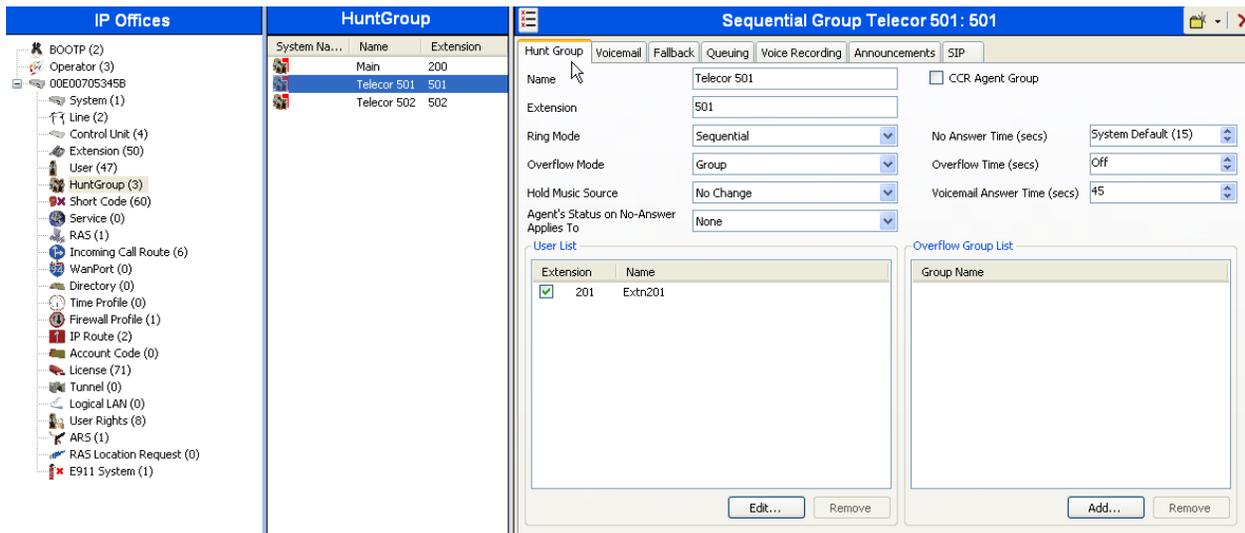
   - Add one or more members to the Hunt Group by clicking the **Edit…** button to get a new window for the **User list**. Select **Available Users** and add them to the **Members** column as shown below. Extension 201 was added to the hunt group for compliance testing (as shown in the screen above).

Sequential HuntGroup 501 Telecor 501   Select Members

Filters

Extn Name	Extn Number

Available Users (45/45)

Name	Extn
Extn201	201
Extn202	202
Extn203	203
Extn204	204
Extn205	205
Extn206	206
Extn207	207
Extn208	208
Extn209	209
Extn210	210
Extn211	211
Extn212	212
Extn213	213
Extn215	215
Extn216	216
Extn217	217
Extn218	218
Extn219	219
Extn220	220
Extn221	221
Extn222	222
Extn223	223
Extn224	224
Extn225	225
Extn226	226
Extn227	227
Extn229	229
Extn230	230
Extn231	231

Add Before

Add After

Append

Remove

Members (1/1)

Order	Enabled	Name	Extn
1	☑	Extn201	201

OK   Cancel   Help

- The default values may be used for the remaining fields.
- Create the secondary hunt group by following the same steps that were used to create the primary hunt group. Extension 301 was added as a member of the secondary hunt group.
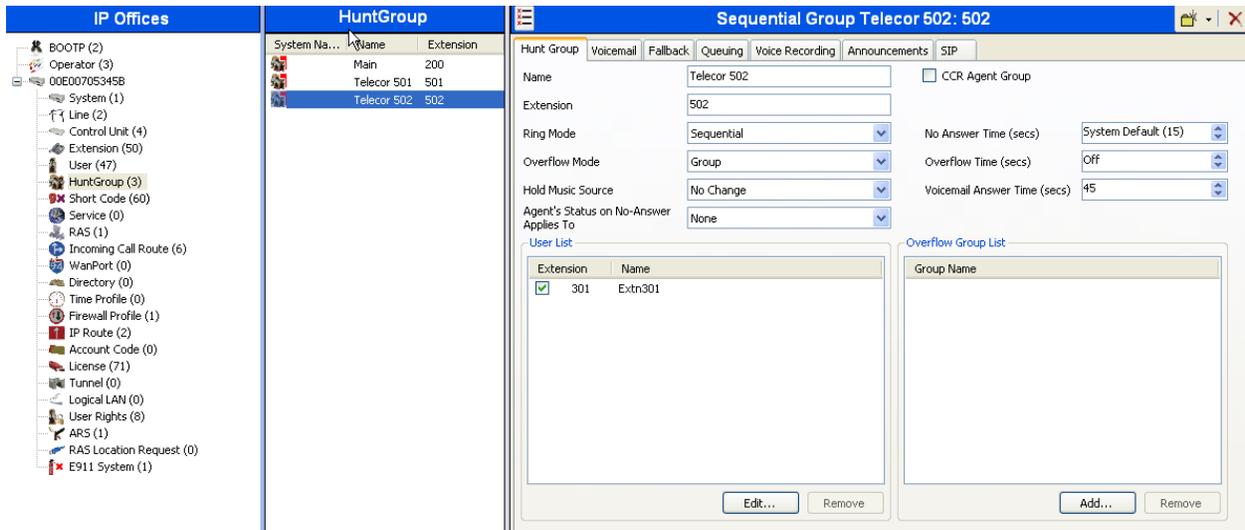
5. *Configure a short code to route calls to pre-recorded announcements*.

Two short codes were created during compliance testing, one for the Menu button and one for the Activities button on the VS-600 Staff Call Station. Each button can be programmed to dial a string (in this case, the short code) to access pre-recorded announcements (for example, a kitchen menu or activities for the week). When the buttons are pressed, the residents will hear the pre-recording message through the VS-600 Staff Call Station's speaker. For compliance testing, Avaya VoiceMail Pro was used to create and play the pre-recorded announcements. The configuration of Avaya VoiceMail Pro is outside the scope of this document; however for completeness, the Avaya VoiceMail Pro modules that were used during compliance testing are shown below.

The **TelecorMenuButton** module simply plays an announcement and then disconnects the call.
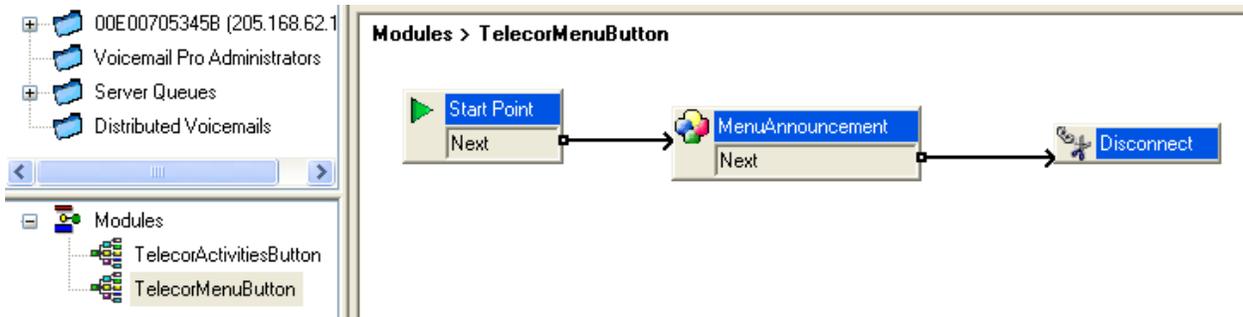
Similarly, the **TelecorActivitiesButton** module also just plays an announcement and then disconnects the call.
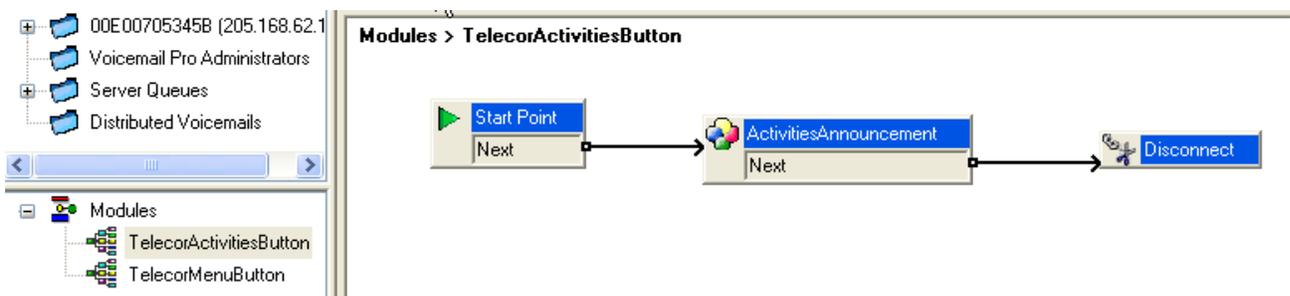
Select **Short Code** in the left panel. Right click and select **Add**.

On the Avaya IP Office Short Code form:
- Select **Voicemail Collect** for the **Feature** field.
- Enter "**#*module_name***" (including the quotes), where ***module_name*** is one of the Avaya VoiceMail Pro modules shown above, for the **Telephone Number** field.
- Enter **0** for the **Line Group Id** field.
- The default values may be used for the fields.

- Repeat these steps to create another short code to access the second Avaya VoiceMail Pro module.

6. After making the changes, click on the floppy disk icon (3rd from left) to push the changes to the IP Office system and have them take effect. **Changes will not take effect until this step is completed. ** NOTE ** This may result in a reboot of Avaya IP Office causing service disruption.**

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5. Configure Telecor VS-600 Staff Call Station

The Resident Unit configuration software is Windows application that is used to configure the Telecor VS-600 Staff Call Station. Launch the Resident Unit application provided by Telecor.

5.1. Options Tab

The display of the **Options Tab** is split into two main areas: **Set Number** and **Parameters**. The **Set Number** area contains the dial strings, priority and dome light settings for each call device/peripheral and for the menu and activities buttons. The **Parameters** area allows the administrator to check the resident unit's battery and internal clock. The **Options Tab** is subdivided into three tabs: **Numbers**, **Supervision Numbers**, and **Misc.** No changes were required on the **Misc.** tab during compliance testing.

5.1.1. Numbers Tab

The **Numbers Tab** contains dial string, priority, and dome light settings for different call-in devices.

1. **Primary**: The **Primary** boxes contain the primary dial string that the VS-600 Staff Call Station will call when a particular device makes a call-in. Set these boxes to the primary hunt group extension administered in **Section 4, Step 4**.
2. **Secondary:** The **Secondary** boxes contain the secondary or rollover dial string that the VS-600 Staff Call Station will call when a particular device makes a call-in and the primary contact does not answer. This number will only be dialed if the **Redial Primary num.** box is checked on the **Prog./Config.** tab. Set these boxes to the secondary hunt group extension administered in **Section 4, Step 4**.
3. **Priority**: A call device can be assigned a priority from 1 (highest) to 6 (lowest). For example, if a resident presses the call button, it dials the assigned phone number and alerts the destination. If the resident then triggers a higher-priority device, such as a call pendant, the call from the call button will be cancelled because of its lower priority, and the higher-priority device will dial its assigned number. Note: When a call device is triggered, there will be a delay of approximately five seconds before the destination is alerted. If the resident activates a higher priority device within five seconds of activating a lower priority device, the lower priority device will still be first to alert the destination.
4. **Light**: From the drop-down box, select which color in the dome light will illuminate when a call is made by the call device. Options are none, red, green, or white.
5. **Menu:** The dial string that the VS-600 Staff Call Station will call when someone presses the Menu button. Set this to the appropriate short code administered in **Section 4, Step 5**.
6. **Activities:** The dial string that the VS-600 Staff Call Station will call when someone presses the Activities button. Set this to the short code administered in **Section 4, Step 5**.
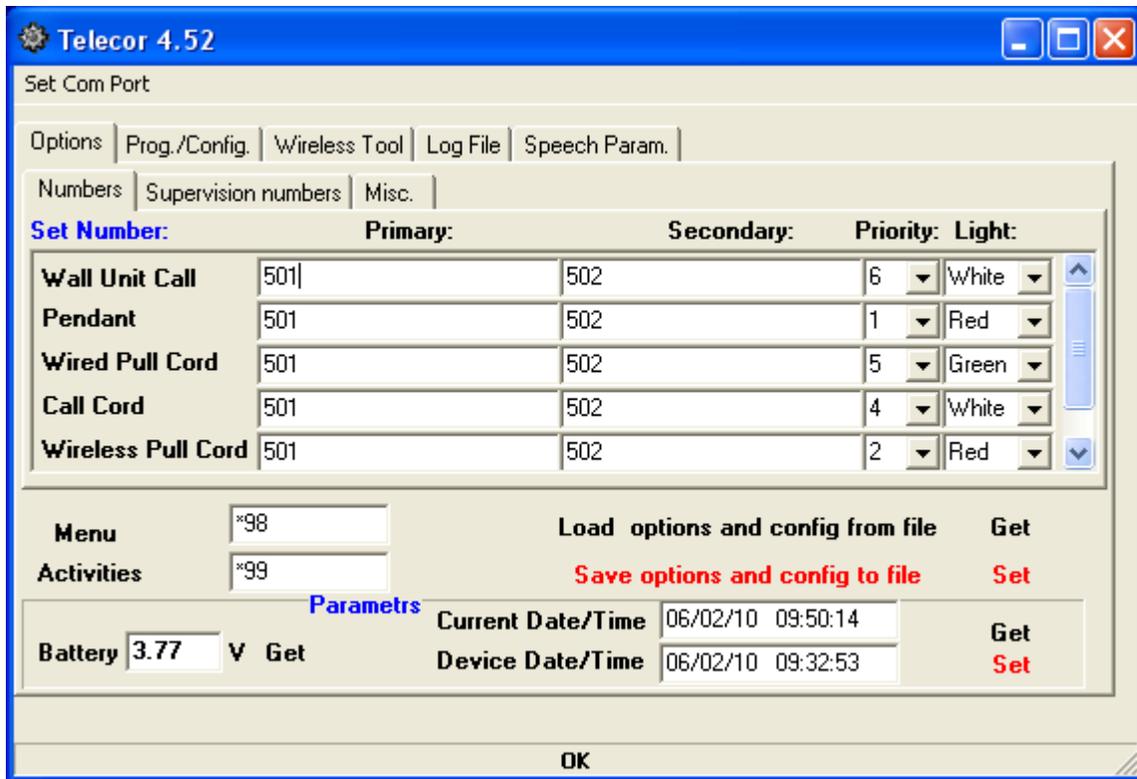
5.1.2. Supervision Numbers Tab

The **Supervision Numbers Tab** contains dial strings for situations triggered from battery or device supervision.

1. Set the **Number** boxes to the primary hunt group extension administered in **Section 4, Step 4**.
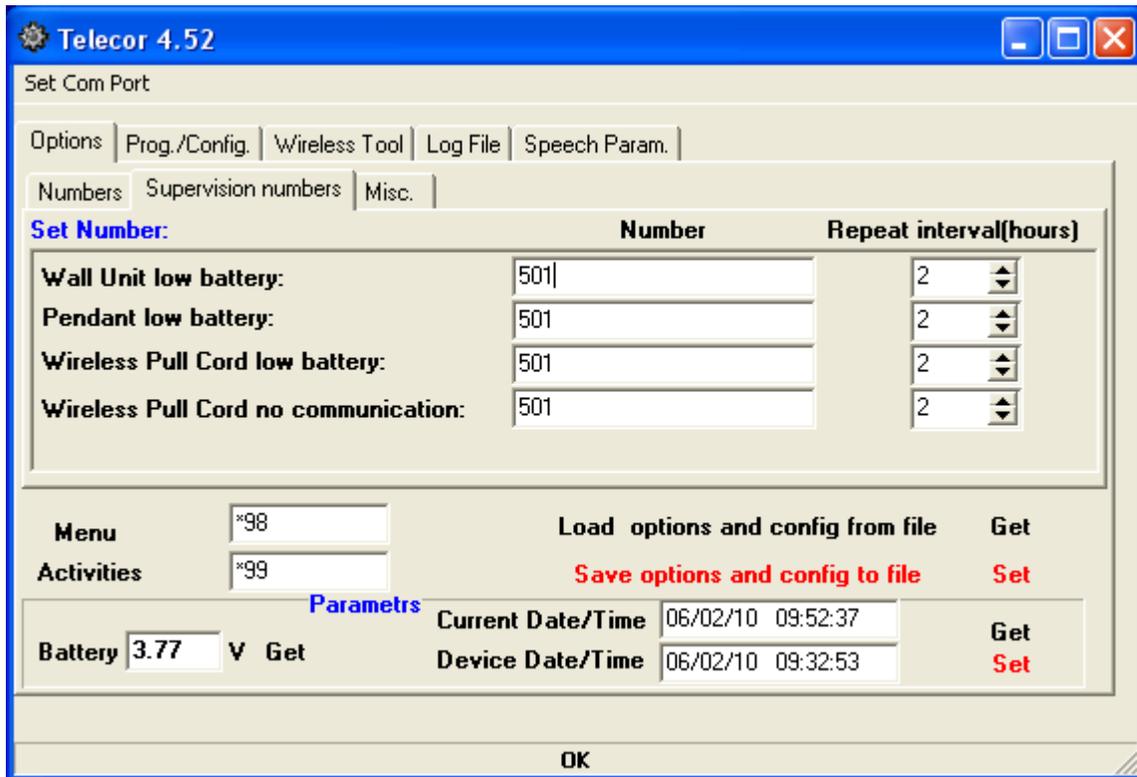
5.1.3. Prog./Config. Tab

The **Prog./Config. Tab** contains programming and configuration settings for the VS-600 Staff Call Station. Use this tab to change the desired behavior when a call goes unanswered, to upgrade the software, to configure the unit for use in a common area, or to configure whether a call from the unit can be cancelled by dialing *9 at the destination. Note: In a majority of installations, these settings do not need to change.

1. **Delay between dialing the numbers**: After dialing a number, the number of seconds to wait before dialing the secondary or rollover number if the call is unanswered. During compliance testing, **20** seconds was used.
2. **Redial Primary num.** (Redial secondary number if primary number does not answer): Check this box to enable the VS-600 Staff Call Station to redial or rollover to the secondary number, after dialing the primary number, if the primary number does not answer.

3. **Redial Secondary num.** (Redial primary number if secondary number does not answer): Check this box to enable the VS-600 Staff Call Station to redial or rollover to the primary number, after dialing the secondary number, if the secondary number does not answer.
4. **Various Delays (ms):** These values are set by default and should not be changed unless instructed to do so by Telecor Technical Support.
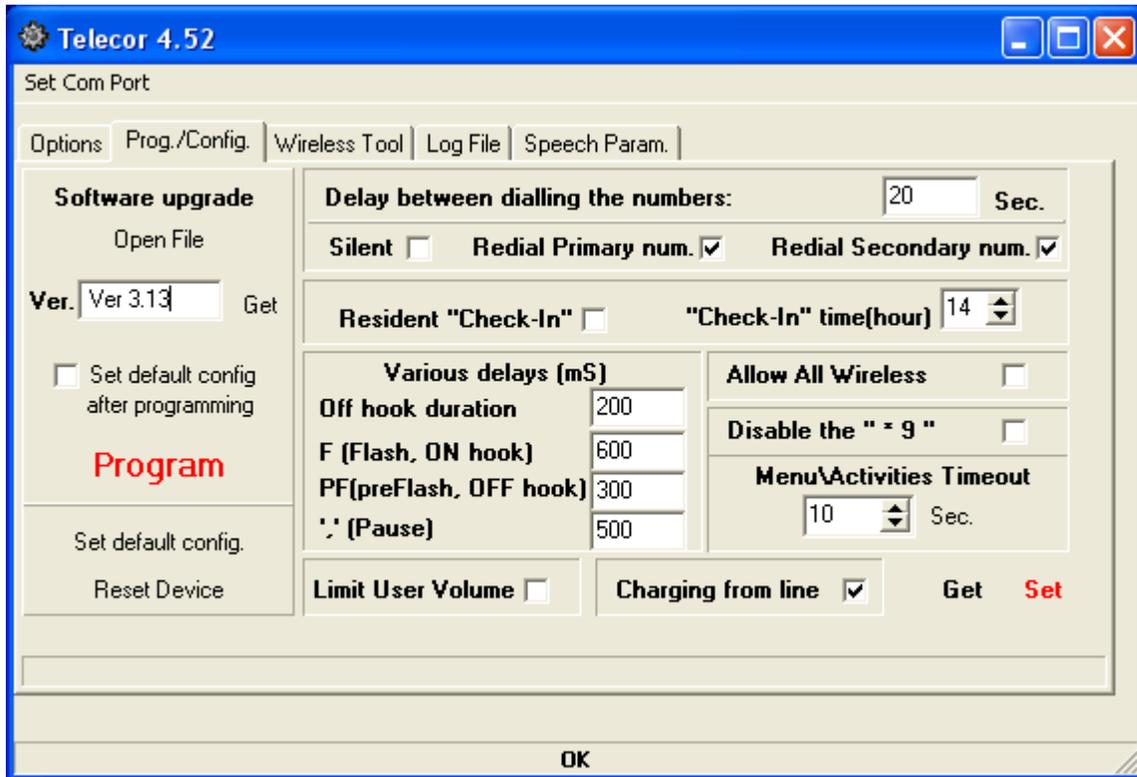
5.1.4. Speech Param. Tab

The **Speech Param. Tab** allows the administrator to adjust the VS-600 Staff Call Station audio settings. Use this tab to adjust microphone volume, speaker volume, or voice switching settings. Note: In a majority of installations, these settings do not need to change.
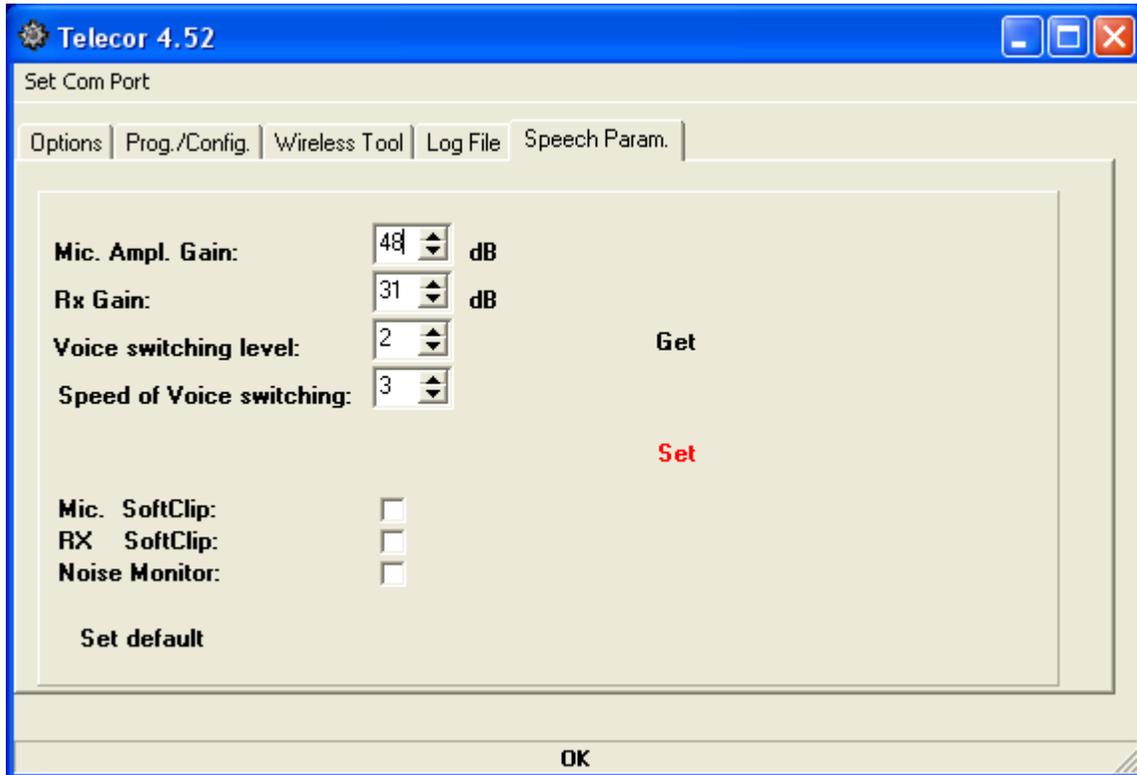
6. General Test Approach and Test Results

This section describes the interoperability compliance testing used to verify Telecor's VS-600 Staff Call Station and peripherals ability to interoperate with Avaya IP Office. This section covers the general test approach and the test results.

The Telecor VS-600 Staff Call Station was connected to Avaya IP Office as an analog device. The peripherals were either directly connected or used wireless communications to communicate with the VS-600 Staff Call station.

In addition to the VS-600 Staff Call Station, the following peripherals were tested:
- Dome Light
- Wireless Pull Cord Station
- Wireless Pendant
- Hard Wired Pull Station
- Call Cord

The compliance testing focused on analog calls from the VS-600 Staff Call Station and peripherals to the telephones on Avaya IP Office, and the redirection of those calls utilizing the features in the VS-600 Staff Call Station. The following functionality was tested:

- Calls initiated by button presses on the VS-600 Staff Call Station
- Calls initiated by the Wireless Pull Cord Station peripheral
- Calls initiated by the Wireless Pendant peripheral
- Calls initiated by the Hard Wired Pull Station peripheral
- Calls initiated by the Call Cord peripheral
- Calls initiated by smoke detection (simulated by physically shorting the proper connection) on the VS-600 Staff Call Station
- Proper failover/redirection for calls that were not answered at the primary and secondary hunt groups.

For all call scenarios, the voice paths and proper termination of the calls were verified. Interoperability testing was completed successfully with all test cases passing.

7. Verification Steps

This section provides verification steps that may be performed to verify that the VS-600 Staff Call Station and peripherals are set up correctly to interoperate with Avaya IP Office.

1. Verify that VS-600 Staff Call station and peripherals can all initiate calls to Avaya IP Office. Answer the calls and verify talk paths.

2. Press the Menu and Activities buttons on the VS-600 Staff Call Station. Verify the proper pre-recorded announcement is played for each button push and then the call is terminated.

3. Verify unanswered calls from the VS-600 Staff Call station and peripherals are properly redirected from the primary hunt group to the secondary hunt group extension and then back to the primary hunt group extension.

8. Conclusion

These Application Notes describe the configuration steps required to configure the Telecor VS-600 Staff Call Station and peripherals to interoperate with Avaya IP Office. The VS-600 Staff Call Station is a device that seamlessly integrates all the functions of a traditional nurse call system, providing instant two-way speech between residents and staff. The configuration described in these Application Notes has been successfully compliance tested.

9. Additional References

This section references the documentation relevant to these Application Notes.

The following Avaya product documentation is available at http://support.avaya.com.

[1] *IP Office 6.0 Installation, Issue 21j,* April 2010
Document Number 15-601042

[2] *IP Office Release 6 Manager 8.0, Issue 24k,* April 2010
Document Number 15-601011

[3] *IP Office Release 6 Voicemail Pro Installation and Maintenance, Issue 22e,* May 2010
Document Number 15-601063

[4] Additional IP Office documentation can be found at:
http://marketingtools.avaya.com/knowledgebase/

Telecor product documentation can be obtained by contacting Telecor:
http://www.telecor.com/Contact_VSCare.htm