



## **Avaya Solution & Interoperability Test Lab**

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# **Application Notes for Configuring Felitron QD-RJ9 F1 Cord and Felitron Epko Noise Cancelling Direct QD Headset with Avaya 9400 and 9500 Series Digital Deskphones – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required to integrate the Felitron QD-RJ9 F1 Cord and Epko Noise Cancelling Direct QD Headset with Avaya 9400 and 9500 Series Digital Deskphones.

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.

# 1. Introduction

These Application Notes describe the configuration steps required to integrate Felitron Epko Noise Cancelling Direct QD Headset using F1 cord with Avaya 9400/9500 Series Digital Deskphones. The Felitron Epko Noise Cancelling Direct QD headset is developed for use in call centers and offices. The F1 cord cable provided by Felitron will be the interface between the Avaya 9400/9500 Series Digital Deskphones and the Felitron Epko Noise Cancelling Direct QD Headset.

In this compliance testing, the following headsets and accessories were tested:

- Felitron Epko Noise Cancelling Direct QD Headset -- Monaural, single-wire direct connect headset. This uses an internal micro amplifier, which allows connection of the headset directly to the telephone set without the use of an external amplifier.
- Felitron QD F1 cord – Quick Disconnect to RJ9 adapter cord, in the F1 wiring configuration. This is used to connect the above headset to the Headset port of the Avaya 9400/9500 Series Deskphones.

## 2. General Test Approach and Test Results

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls to and from the 9400/9500 Deskphones with Felitron Epko Noise Cancelling Direct QD Headset and verifying two-way audio. The call types included calls to voicemail, to local extensions, and to the PSTN.

The serviceability testing focused on verifying the usability of the Felitron Epko Noise Cancelling Direct QD Headset by disconnecting the F1 cable from the headset, unplugging the cord from the phone, and resetting the 9400/9500 Deskphones.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

Avaya's formal testing and Declaration of Conformity is provided only on the headsets/handsets that carry the Avaya brand or logo. Avaya may conduct testing of non-Avaya headset/handset to determine interoperability with Avaya phones. However, Avaya does not conduct the testing of non-Avaya headsets/handsets for: Acoustic Pressure, Safety, Hearing Aid Compliance, EMC regulations, or any other tests to ensure conformity with safety, audio quality, long-term reliability or any regulation requirements. As a result, Avaya makes no representations whether a particular non-Avaya headset will work with Avaya's telephones or with a different generation of the same Avaya telephone.

Since there is no industry standard for headset interfaces, different manufacturers utilize different headset interfaces with their telephones. Therefore, any claim made by a headset vendor that its

product is compatible with Avaya telephones does not equate to a guarantee that the headset will provide adequate safety protection or audio quality.

## 2.1. Interoperability Compliance Testing

All test cases were performed manually. The following features were verified:

- Placing calls to the voicemail system. Voice messages were recorded and played back to verify that the playback volume and recording level were good.
- Placing and receiving calls to and from internal extensions to verify two-way audio.
- Placing and receiving calls to and from the PSTN to verify two-way audio.
- Hearing ring back tone for incoming and outgoing calls.
- Answering and ending calls using the headset button on the 9400/9500 Deskphones.
- Using the volume control buttons on the headset to adjust the audio volume.
- Using the mute control button on the headset and on the 9400/9500 Deskphones to mute and un-mute the audio.

For serviceability testing, the headset was disconnected and reconnected to verify proper operation. The 9400/9500 Deskphones were also restarted for the same purpose.

## 2.2. Test Results

Testing was completed successfully with the following observations.

- The headset button on the 9400 and 9500 Deskphones displays ON and the phone is still in active when the far end hangs up call. The workaround for this issue is, the user has to press the headset button on the phone to make the phone become idle. This issue is under investigation by Avaya client team.

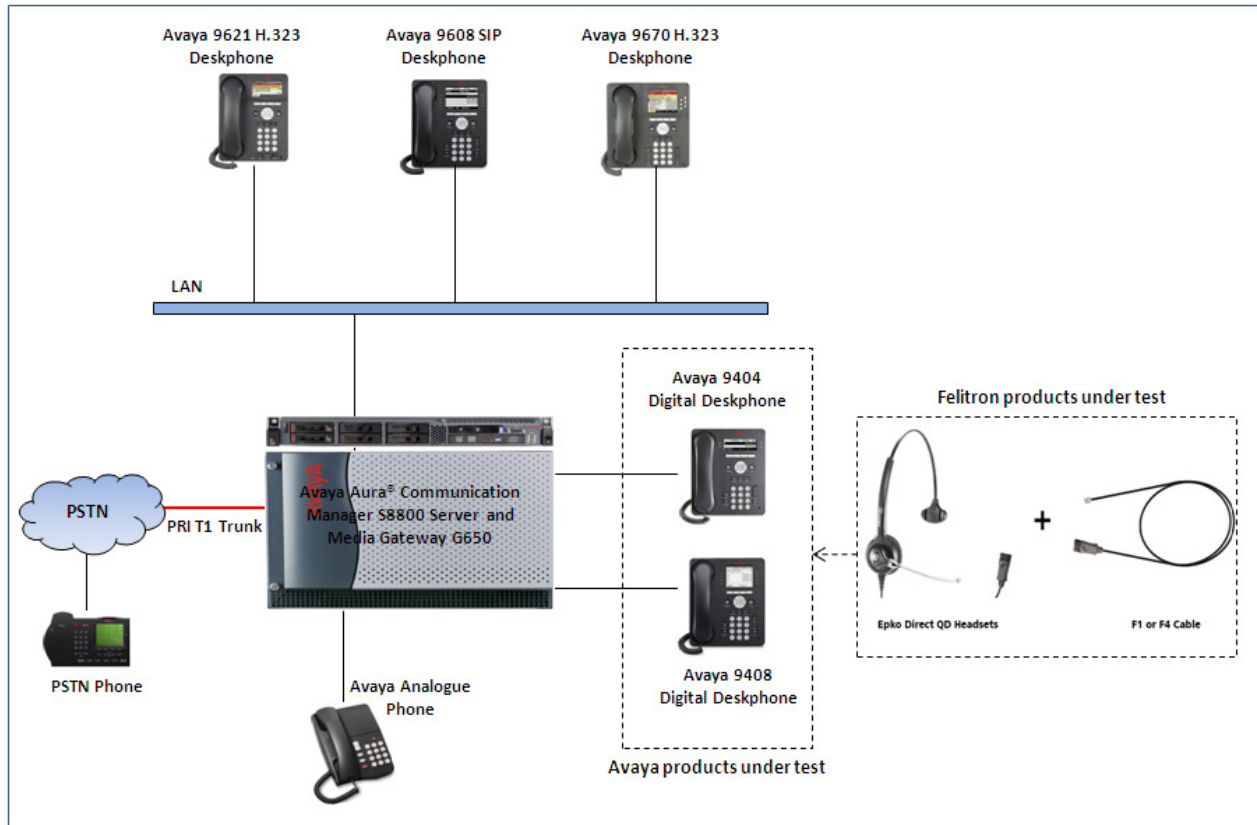
## 2.3. Support

For support on the Felitron Headsets solution, contact Felitron technical support at:

Website: <http://www.felitron.com.br>

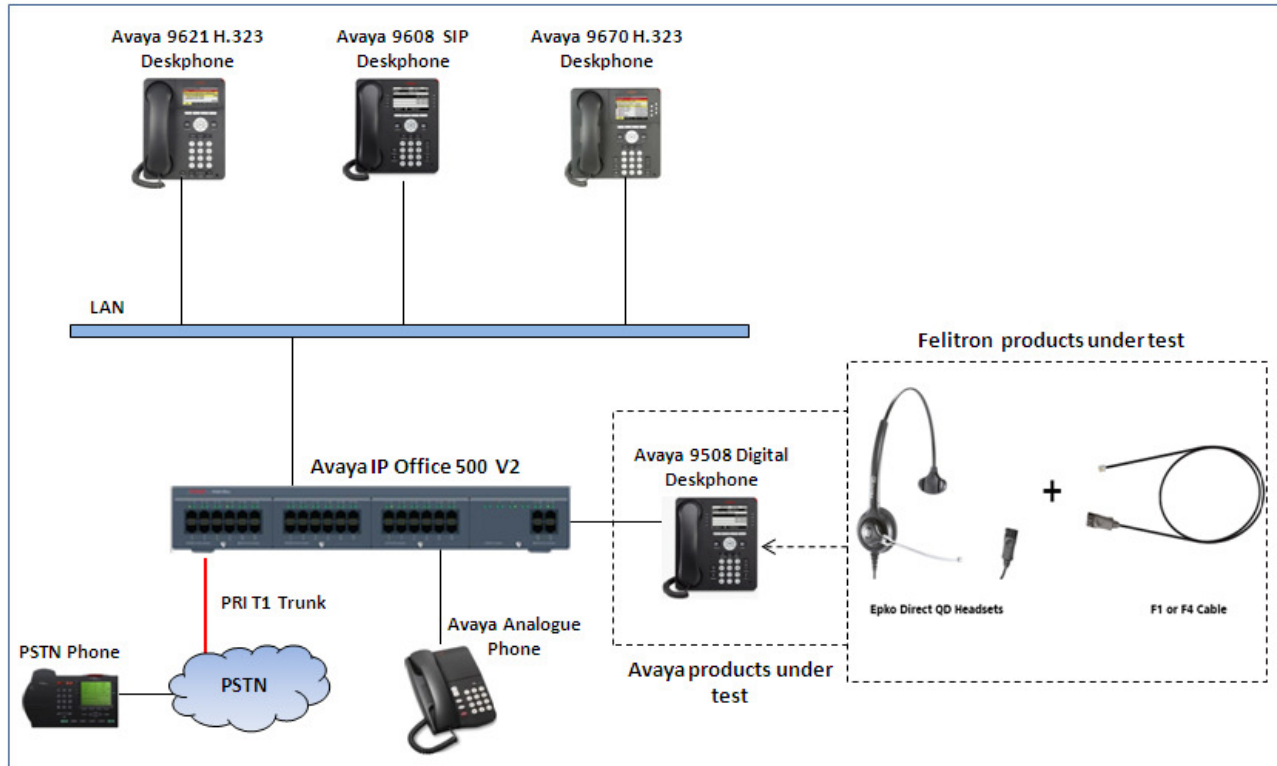
### 3. Reference Configuration

**Figure 1** illustrates the test configuration used to verify Felitron Epko Noise Cancelling Direct QD Headset using F1 cord with Avaya 9400 Series Digital Deskphones. For the Avaya 9400 Series Digital Deskphones the configuration consists of an Avaya S8800 Server running Avaya Aura® Communication Manager with an Avaya G650 Media Gateway, the T1/PRI trunk from the G650 connects to the PSTN.



**Figure 1: Test diagram for Avaya 9400 Series Digital Deskphones with Felitron Epko Noise Cancelling Direct QD Headset Using F1 Cord**

**Figure 2** illustrates the test configuration used to verify the Felitron Epko Noise Cancelling Direct DQ Headset with Avaya 9500 Series Digital Deskphones. For the Avaya 9500 Series Digital Deskphone the configuration consisted of an Avaya IP Office 500 V2 and an IP Office Digital expansion module.



**Figure 2: Test diagram for Avaya 9500 Series Digital Deskphones with Felitron Epko Noise Cancelling Direct QD Headset Using F1 Cord**

## 4. Equipment and Software Validated

The following equipment and software were used for the compliance test:

Equipment	Software
Avaya Aura® Communication Manager running on an Avaya S8800 Server	R6.3 – FP2 Build R016x.03.0.124.0 Patch 20553
Avaya Media Gateway G650 <ul style="list-style-type: none"><li>▪ IP Server Interface TN2312BP</li><li>▪ Digital Line TN2224</li></ul>	<ul style="list-style-type: none"><li>▪ FW043</li><li>▪ 000006</li></ul>
Avaya IP Office 500V2	8.1.68
Avaya 9621G H.323 Deskphone	6.2313
Avaya 9670 H.323 Deskphone	6.2313
Avaya 9608 SIP Deskphone	6.2.2
Avaya 9404 Digital Deskphone	21
Avaya 9408 Digital Deskphone	21
Avaya 9508 Digital Deskphone	45
Avaya Analog Deskphone	N/A
Felitron Epko Noise Cancelling Direct QD Headset	N/A
Felitron QD F1 Cord	N/A

## 5. Configure Avaya Aura® Communication Manager

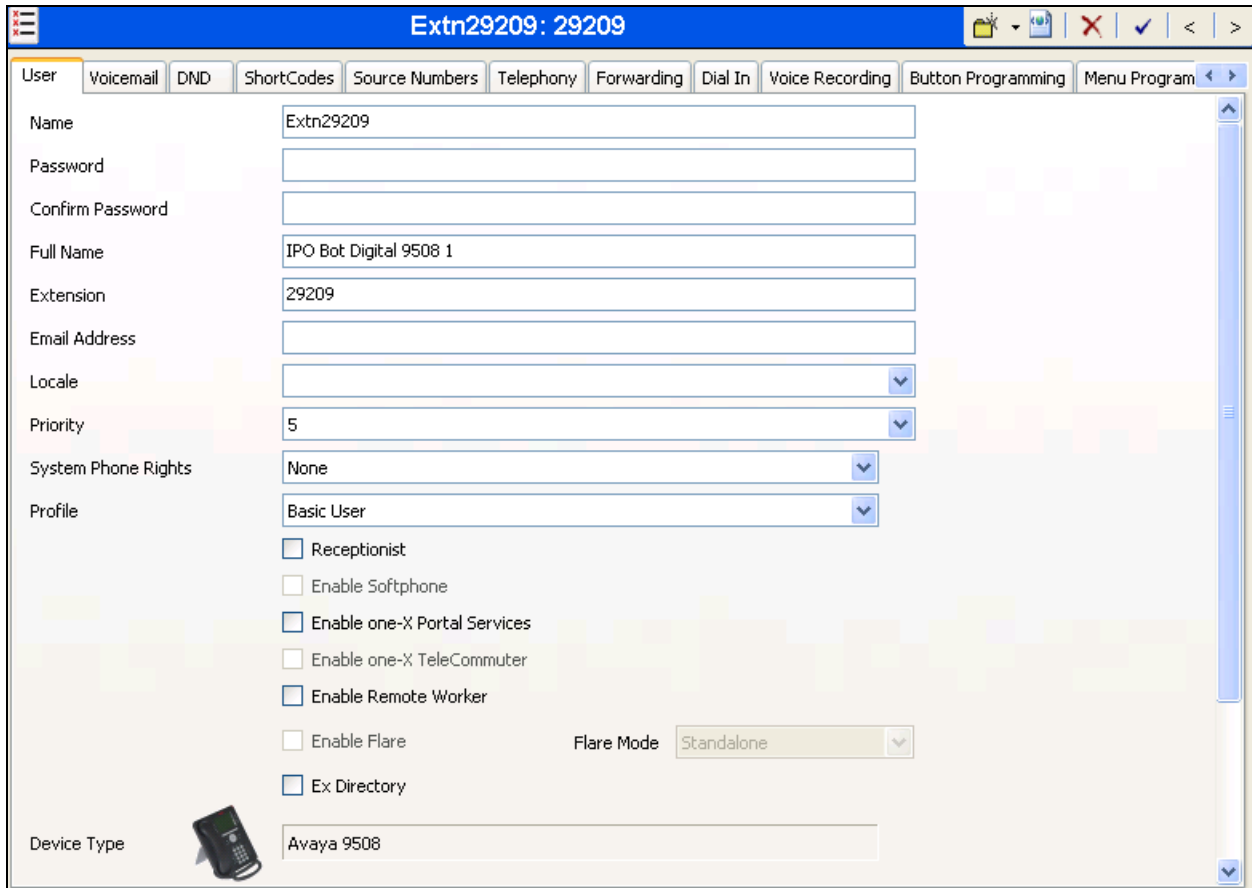
This section displays the station configuration for the 9400 Series Deskphones. The configuration is performed via the System Access Terminal (SAT) on Avaya Aura® Communication Manager.

These Application Notes assume that the Avaya 9400 Series Digital Deskphones are configured and operational in Avaya Aura® Communication Manager. There are no additional settings required on Avaya Aura® Communication Manager for the connection of the Felitron Noise Cancelling Direct QD headset to the Avaya 9400 Series Digital Deskphone. An example of a 9400 Series Digital Station provisioned in Avaya Aura® Communication Manager is illustrated below.

```
display station 53042                                     Page 1 of 4
                                                         STATION
Extension: 53042                                     Lock Messages? n          BCC: 0
Type: 9408                                           Security Code:             TN: 1
Port: 01A0503                                       Coverage Path 1:          COR: 1
Name: DCP 54042                                       Coverage Path 2:          COS: 1
                                                         Hunt-to Station:
STATION OPTIONS
                                                         Time of Day Lock Table:
Loss Group: 2                                           Personalized Ringing Pattern: 1
                                                         Message Lamp Ext: 53042
Speakerphone: 2-way                                     Mute Button Enabled? y
Display Language: english
Survivable COR: internal
Survivable Trunk Dest? y                               IP SoftPhone? n
                                                         Remote Office Phone? n
                                                         IP Video? n
```

## 6. Configure Avaya IP Office

These Application Notes assume that the Avaya 9500 Series Digital Telephones are configured and operational in IP Office. There are no additional settings required on IP Office for the connection of the Felitron Noise Cancelling Direct QD Headset to the Avaya 9500 Series Digital Deskphones. An example of a 9500 Series Digital Station provisioned in IP Office is illustrated below.



The screenshot shows the configuration page for extension 29209 in the Avaya IP Office system. The page title is "Extn29209: 29209". The interface includes a navigation menu at the top with tabs for "User", "Voicemail", "DND", "ShortCodes", "Source Numbers", "Telephony", "Forwarding", "Dial In", "Voice Recording", "Button Programming", and "Menu Program". The "User" tab is selected. The configuration fields are as follows:

- Name: Extn29209
- Password: (empty)
- Confirm Password: (empty)
- Full Name: IPO Bot Digital 9508 1
- Extension: 29209
- Email Address: (empty)
- Locale: (dropdown menu)
- Priority: 5
- System Phone Rights: None
- Profile: Basic User
- Receptionist:
- Enable Softphone:
- Enable one-X Portal Services:
- Enable one-X TeleCommuter:
- Enable Remote Worker:
- Enable Flare:
- Flare Mode: Standalone
- Ex Directory:
- Device Type: Avaya 9508



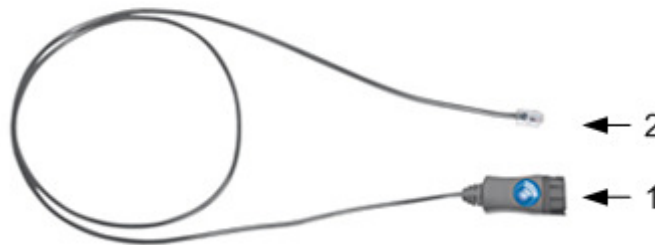
## 7. Configure Felitron Epko Noise Cancelling Direct QD

This section describes the configured steps for the Felitron Epko Noise Cancelling Direct QD Headset with the Avaya 9400/9500 Series Deskphones.

The Quick Disconnect plug of the Epko headset connects to the QD end of the QD to Modular F1 cord. The modular end of the F1 cord connects to the Headset jack of the Avaya 9400/9500 Series Deskphones.

The functionality of the headset is controlled by the individual buttons on the 9400 and 9500 telephone set. No additional configuration is required.

### Felitron QD to Modular F1 Cord



- 1- Quick Disconnect (QD) plug
- 2- Modular plug (RJ9)

## 8. Verification

This section provides the steps that can be performed to verify proper installation of the Felitron headset and adapter cord with the Avaya 9400/9500 Series Deskphones:

1. Press the Headset button on the Avaya 9400/9500 Deskphones. Verify dial tone is heard on the headset.
2. Place a call to another extension.
3. Verify two-way audio between the headset and the called extension.
4. Press the Mute button on the 9400/9500 Deskphones and verify the call can be muted/unmuted.
5. Verify the volume can be adjusted by the Volume control on the 9400/9500 Deskphones.
6. Disconnect the call from the headset pressing the Headset button. Verify that the call is properly disconnected.

## 9. Conclusion

These Application Notes describe the configuration steps required to integrate the Felitron Epko Noise Cancelling Direct QD Headset using F1 cord cable with Avaya 9400/9500 Series Digital Deskphones. All test cases were completed successfully. Testing was completed successfully with observation noted in **Section 2.2**.

## 10. Additional References

This section references the Avaya and Felitron documentation that are relevant to these Application Notes.

The following Avaya product documentation can be found at <http://support.avaya.com>.

[1] Administering Avaya Aura® Communication Manager, Release 6.3, Issue 6.0, May 2013, Document Number 03-300509.

[2] Avaya 9400 Series Digital Deskphone for Avaya Aura® Communication Manager Installation and Maintenance Guide, Rel. 1.0, August 2011, Document Number 16-603533.

[3] Avaya IP Office 9500 Series User Guide, Issue 05d, April 05, 2012.

Felitron documentation can be found at <http://www.felitron.com.br/site/inicio>

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