Sprint Voice Pro Installation Guide

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Document Information

Abstract

This document details a description of the connection scenario of the Sprint Voice Pro (AVC) unit.

Revision History

<table>
<thead>
<tr>
<th>Revision Details</th>
<th>Date</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1</td>
<td>January 2019</td>
<td>• Initial draft document &amp; comments</td>
</tr>
<tr>
<td>A</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• Publish</td>
</tr>
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About This Document

Purpose

This Installation Guide is intended as an instructional manual to provide step-by-step instructions for installation of the Sprint Voice Pro (AVC).

Intended Audience

This guide is intended for persons who are installing the Sprint Voice Pro unit.
Customer Care Help Desk

Airspan’s *Customer Care Help Desk* offers prompt and efficient customer support services.

**Note:** To avail Airspan’s *Customer Care Help Desk* support, you must be a registered user and must have a valid support contract. To register, click [here](#) and fill the *Registration* form.

To create and update issue logs, send e-mails to *Customer Care Help Desk*. Once you submit your issue, the system generates a new issue and sends an issue number for your reference. The system uses this issue number to categorize and store e-mails under the appropriate issue.

To help *Customer Care Help Desk* identify your issue, include the issue number and your *Customer Care Helpdesk* account details in all further communications.

<table>
<thead>
<tr>
<th><strong>Main Operations</strong></th>
<th><strong>Worldwide Headquarters</strong></th>
</tr>
</thead>
<tbody>
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</table>

Airspan Encourages Comments

Airspan welcomes any feedback and suggestions that help to improve the quality of the documentation. Send your feedback to [documentfeedback@airspan.com](mailto:documentfeedback@airspan.com).
1 Overview

The Sprint Voice Pro enables voice via CDMA. This installation guide is intended to explain how to connect the Voice Pro unit.
2 Installing the Sprint Voice Pro

This section provides a description of how to connect the Sprint Voice Pro, including:

- Removing the Sprint Voice Pro from the packaging
- Connect the Cables
- Connect PSU to the Sprint Voice Pro
- Plugging the PSU into the wall outlet

2.1 Check the Contents

Upon receiving the Sprint Voice Pro open the box and:

1. Carefully remove the Sprint Voice Pro from its packaging.
2. Check that all the components are in the box.
   - Voice Pro unit
   - Ethernet cable
   - External GPS Antenna
   - Power Supply unit

![Figure 1: Sprint Voice Pro](image)

2.2 Where to Place the Unit

The optimal position to place the Voice Pro is as listed below:

- In an elevated location, such as the top of a shelf or tall cabinet
- Within 10 to 20 feet of a clear view of the sky
- Within reach of your broadband modem or router
- Within reach of an electrical outlet
- Turn the unit so the front faces into the room and carefully move all cables
2.3 Installing the Sprint Voice Pro

Follow these step-by-step instructions to install the Sprint Voice Pro:

Figure 2: Voice Pro Back
1. Turn the Voice Pro unit to expose the back of the unit.
2. Connect one end of the Ethernet cable to an available LAN port on your broadband connection modem, or to a LAN port on your network. If on network:
   - Open UDP ports 53, 67, 500 and 4500 bi-directionally
   - Contact your IT administrator for assistance
3. Place the other end of the Ethernet cable in the unit’s Ethernet port.
4. Connect the External GPS antenna to the GPS connection port on the side of the Sprint Magic Box Voice Pro, under the cap.
5. Plug the power supply cable into the DC IN port on the back of the unit.
6. Place the GPS antenna base on a flat surface next to a closed window.
7. Plug the other end of the power supply unit into an available electrical outlet.

**Note:** A surge protected outlet is recommended.

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**Figure 3: Sprint Voice Pro Connections**

![Diagram showing Sprint Voice Pro connections with numbered points corresponding to the steps in the installation guide.]

**Note:** The Sprint Voice Pro must be connected to the Sprint network in order for the Sprint Voice Pro to work.
3 Troubleshooting - Sprint Voice Pro

Table 1: LED Display

<table>
<thead>
<tr>
<th>LED</th>
<th>Color &amp; Pattern</th>
<th>Description</th>
<th>User Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WAN</strong></td>
<td>Solid Green</td>
<td>WAN port is connected to peer and has obtained an IP addresses over the local network.</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Blinking Green</td>
<td>Acquiring IP Address. (DHCP process)</td>
<td>Wait</td>
</tr>
<tr>
<td></td>
<td>Solid Red</td>
<td>HW problem or connection problem.</td>
<td>Connect Ethernet Cable. If continues – Contact Sprint</td>
</tr>
<tr>
<td></td>
<td>Blinking Red</td>
<td>The device is initializing</td>
<td>Wait</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>SW Loading</td>
<td></td>
</tr>
<tr>
<td><strong>C-NET</strong></td>
<td>Solid Green</td>
<td>CDMA IPSec Tunnel established</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Solid Red</td>
<td>CDMA IPSec tunnels is down or has not established a connection. (More than 15 minutes)</td>
<td>Contact Sprint</td>
</tr>
<tr>
<td></td>
<td>Blinking Red</td>
<td>CDMA IPSec tunnel is establishing a connection. Blinks as long as tunnel still establishing. Tunnel have gone down for less than 15 minutes.</td>
<td>Wait</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>SW Loading</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>Solid Green</td>
<td>GPS device has acquired a lock and is ready.</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Solid Red</td>
<td>GPS error. GPS has not achieve fix since Boot up (30 minutes or more)</td>
<td>Verify external antenna is connected and located close to a window. If continues – Contact Sprint</td>
</tr>
<tr>
<td></td>
<td>Blinking Red</td>
<td>GPS is acquiring a lock</td>
<td>Wait</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>SW is loading</td>
<td></td>
</tr>
<tr>
<td><strong>CDMA</strong></td>
<td>Solid Green</td>
<td>Voice service is up.</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Solid Red</td>
<td>Voice service error. Voice service has been down for 30 minutes.</td>
<td>Contact Sprint</td>
</tr>
<tr>
<td></td>
<td>Blinking Red</td>
<td>Voice service is coming up, or voice service is down for 15 minutes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>Voice service disabled by the operator.</td>
<td>Contact Sprint</td>
</tr>
<tr>
<td><strong>CDMA All LEDs</strong></td>
<td>Solid Red</td>
<td>CDMA Femto HW Error</td>
<td>Contact Sprint</td>
</tr>
</tbody>
</table>
4 FCC Statement

Federal Communications Commission (FCC) Interference Statement (Part 15.105(b))

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

• Reorient or relocate the receiving antenna
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

FCC Compliance Statement (Part 15.19)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution (Part 15.21)

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FCC Radiation Exposure Statement (OET Bulletin 65)

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device should be installed and operated at a minimum distance of 20cm between itself and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
5 UL Authorization Statement

NOTICE OF COMPLETION AND
AUTHORIZATION TO APPLY THE UL MARK

MS. SHARON LIN
Hon Lin Technology Co Ltd
11th Fl 32 Jihu Rd Neihu District Taipei, 114, TW

Your Reference: 1808T083
Project Scope: UL/CUL 60950-1 for 1) Femto Cell (Sprint Magic Box Voice Pro); 2) Femto Cell (AIRAVE 4 LTE), Models 1) AVC; 2) AV100C (Report Reference Number: E199598-A172)

Dear MS. SHARON LIN:

Congratulations! UL's investigation of your product(s) has been completed under the above Reference Number and the product was determined to comply with the applicable requirements. This letter temporarily supplements the UL Follow-Up Services Procedure and serves as authorization to apply the UL Mark at authorized factories under UL's Follow-Up Service Program. To provide your manufacturer(s) with the intended authorization to use the UL Mark, you must send a copy of this notice to each manufacturing location currently authorized under File E199598, Vol. X2.

Records in the Follow-Up Services Procedure covering the product are now being prepared and will be sent in the near future. Until then, this letter authorizes application of the UL Mark for 90 days from the date indicated above.

Additional requirements related to your responsibilities as the Applicant can be found in the document “Applicant responsibilities related to Early Authorizations” that can be found at the following web-site: http://www.ul.com/EAResponsibilities

Any information and documentation provided to you involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

We are excited you are now able to apply the UL Mark to your products and appreciate your business. Feel free to contact me or any of our Customer Service representatives if you have any questions.

Very truly yours, Reviewed by:

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Nate.Hsu@ul.com Bruce.A.Mahrenholz@ul.com
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