

Advanced, Affordable, Feature Rich IP Phone for the Home Office and Business



Comprehensive Interoperability and SIP Based Feature Set

Based on the SIP standard, the SPA921 has been tested to ensure comprehensive interoperability with equipment from VoIP infrastructure leaders enabling service providers to quickly roll-out competitive, feature rich services to their customers. With hundreds of features and configurable service parameters, the SPA921 addresses the requirements of traditional business users while leveraging the advantages of IP telephony. Features such as easy station moves, presence, and shared line appearances (across local and geographically dispersed locations) are just some of the many advantages of the SPA921.

Carrier-Grade Security, Provisioning, and Management

The SPA921 uses standard encryption protocols to provide secure remote provisioning and unobtrusive in-service software upgrades. Linksys secure remote provisioning tools include detailed performance measurement and troubleshooting features, enabling network providers to deliver high quality support to their subscribers. Remote provisioning also saves service providers the hassle and expense of managing, pre-loading, and re-configuring customer premise equipment (CPE).

Model No. **SPA921**

Features

Telephony

- One Voice Line with Two Call Appearances
- Backlit Pixel Based Display: 128x64 Monochrome Graphical Liquid Crystal Display (LCD)
- Line Status - Active Line Indication, Name and Number
- Menu Driven User Interface
- Shared Line Appearance **
- Speakerphone
- Call Hold
- Music on Hold **
- Call Waiting
- Caller ID Name and Number and Outbound Caller ID Blocking
- Outbound Caller ID Blocking
- Call Transfer - Attended and Blind
- Three Way Call Conferencing with Local Mixing
- Connects to External Conference Bridge for Multi-party Conferencing
- Automatic Redial of Last Calling and Last Called Numbers
- On-Hook Dialing
- Call Pick Up - Selective and Group **
- Call Park and UnPark **
- Call Swap
- Call Back on Busy
- Call Blocking - Anonymous and Selective
- Call Forwarding - Unconditional, No Answer, On Busy
- Hot Line and Warm Line Automatic Calling
- Call Logs (60 entries each): Made, Answered, and Missed Calls
- Redial from Call Logs
- Personal Directory with Auto-dial (100 entries)
- Do Not Disturb (callers hear line busy tone)
- Digits Dialed with Number Auto-Completion
- Anonymous Caller Blocking
- URI (IP) Dialing Support (Vanity Numbers)
- On Hook Default Audio Configuration (Speakerphone and Headset)
- Multiple Ring Tones with Selectable Ring Tone per Line
- Called Number with Directory Name Matching
- Call Number using Name - Directory Matching or via Caller ID
- Subsequent Incoming Calls with Calling Name and Number
- Date and Time with Intelligent Daylight Savings Support
- Call Duration and Start Time Stored in Call Logs
- Call Timer
- Name and Identity (Text) Displayed at Start Up
- Distinctive Ringing Based on Calling and Called Number
- Ten User Downloadable Ring Tones - Ring Tone Generator Free from www.linksys.com
- Speed Dialing, Eight Entries
- Configurable Dial/Numbering Plan Support
- Intercom **
- Group Paging **
- NAT Traversal, including STUN Support
- DNS SRV and Multiple A Records for Proxy Lookup and Proxy Redundancy
- Syslog, Debug, Report Generation, and Event Logging
- Secure Call Encrypted Voice Communication Support
- Built-in Web Server for Administration and Configuration with Multiple Security Levels
- Automated Remote Provisioning, Multiple Methods. Up to 256 Bit Encryption: (HTTP, HTTPS, TFTP)
- Optionally Require Admin Password to Reset Unit to Factory Defaults
- ** Feature requires support by call server

Features

Regulatory Compliance Security

Documentation

Package Contents

Environmental

Hardware

- Pixel Based Display: 128x64 Monochrome LCD Graphical Display
- Dedicated Illuminated Buttons for:
 - Audio Mute On/Off
 - Headset On/Off
 - Speakerphone On/Off
- Four Soft Key Buttons
- Four Way Rocking Directional Knob for Menu Navigation
- Voice Mail Message Waiting Indicator Light
- Voice Mail Message Retrieval Button
- Dedicated Hold Button
- Settings Button for Access to Feature, Set-up, and Configuration Menus
- Volume Control Rocking Up/Down Knob Controls Handset, Headset, Speaker, Ringer
- Standard 12-Button Dialing Pad
- High Quality Handset and Cradle
- Built-In High Quality Microphone and Speaker
- Headset Jack – 2.5 millimeter
- Ethernet LAN – 10BaseT RJ-45
- 5 volt DC Universal (100-240 Volt) Switching Power Adaptor
- LED Test Function

- FCC (Part 15, Class B) , CE Mark, A-Tick

- Password Protected System, Preset to Factory Default
- Password Protected Access to Administrator and User Level Features
- HTTPS with Factory Installed Client Certificate
- HTTP Digest - Encrypted Authentication via MD5 (RFC 1321)
- Up to 256-bit AES Encryption

- Quick-Start Installation and Configuration Guide
- User Guide
- Administration Guide
- Provisioning Guide - For Service Providers Only

- 1 - SPA921 IP Phone, Handset, and Stand
- 1 - Handset Cord - 56 cm (26 in)
- 1 - 5v Power Adapter - 1.8 m (6 ft) Cord
- 1 - RJ45 Ethernet Cable - 1.8 m (6 ft) Cord
- 1 - Quick Installation Guide

Dimensions	7.68 x 6.30. x 7.09 in (195 x 160 x 180 mm) W x H x D
Unit Weight	2.15 lbs (0.9752 kg)
Operating Temp.	41°~113°F (5°~45°C)
Storage Temp.	-13°~185°F (-25°~85°C)
Operating Humidity	10~90% Non-condensing
Storage Humidity	10~90% Non-Condensing

Specifications

Model	SPA921 Note: Many features are programmable within a defined range or list of options. Please see the SPA Administration Guide for details. The target configuration profile is uploaded to the SPA922 at the time of provisioning.
Data Networking	MAC Address (IEEE 802.3) IPv4 - Internet Protocol v4 (RFC 791) upgradeable to v6 (RFC 1883) ARP - Address Resolution Protocol DNS - A Record (RFC 1706), SRV Record (RFC 2782) DHCP Client - Dynamic Host Configuration Protocol (RFC 2131) ICMP - Internet Control Message Protocol (RFC792) TCP - Transmission Control Protocol (RFC793) UDP - User Datagram Protocol (RFC768) RTP - Real Time Protocol (RFC 1889) (RFC 1890) RTCP - Real Time Control Protocol (RFC 1889) DiffServ (RFC 2475), Type of Service - TOS (RFC 791/1349) VLAN Tagging 802.1p/q - Layer 2 QoS SNTP - Simple Network Time Protocol (RFC 2030)
Voice Gateway	SIPv2 - Session Initiation Protocol Version 2 (RFC 3261, 3262, 3263, 3264) SIP Proxy Redundancy - Dynamic via DNS SRV, A Records Re-registration with Primary SIP Proxy Server SIP Support in Network Address Translation Networks - NAT (including STUN) SIPFrag (RFC 3420) Secure (Encrypted) Calling via Pre-Standard Implementation of Secure RTP Codec Name Assignment Voice Algorithms: - G.711 (A-law and μ -law) - G.726 (16/24/32/40 kbps) - G.729 A - G.723.1 (6.3 kbps, 5.3 kbps) Dynamic Payload Support Adjustable Audio Frames Per Packet DTMF: In-band and Out-of-Band (RFC 2833) (SIP INFO) Flexible Dial Plan Support with Inter-Digit Timers IP Address / URI Dialing Support Call Progress Tone Generation Jitter Buffer - Adaptive Frame Loss Concealment VAD - Voice Activity Detection with Silence Suppression Attenuation / Gain Adjustments MWI - Message Waiting Indicator Tones VMWI - Voice Mail Waiting Indicator - Via NOTIFY, SUBSCRIBE Caller ID Support (Name and Number) Third Party Call Control (RFC 3725)
Provisioning, Administration & Maintenance:	Integrated Web Server Provides Web Based Administration and Configuration Telephone Key Pad Configuration via Display Menu / Navigation Automated Provisioning and Upgrade via HTTPS, HTTP, TFTP Asynchronous Notification of Upgrade Availability via NOTIFY Non-intrusive, In-Service Upgrades Report Generation and Event Logging Statistics Transmitted in BYE Message Syslog and Debug Server Records - Configurable Per Line
Power Supply	1 10baseT RJ-45 Ethernet Port (IEEE 802.3) Handset: RJ-7 Connector Built-in Speakerphone and Microphone Headset 2.5 mm Port
Physical Interfaces:	Switching Type (100-240v) Automatic DC Input Voltage: +5 Volts DC at 2.0 Amps Maximum Power Consumption: 5 Watts Power Adapter: 100-240v - 50-60Hz (26-34VA) AC Input, 1.8m (6 ft) cord
Indicator Lights/LED:	Four (4) Call Appearance/Line Buttons with Associated Tricolor LED Line LED State Indication: Active, Idle, On Hold, Unregistered Speakerphone On/Off Button with LED Headset On/Off Button with LED Mute Button with LED Message Waiting Indicator LED Voicemail Message Retrieval Button Hold Button LED Test Function

Stylish and functional in design, the SPA921 IP Phone is ideal for a residence or business using a hosted IP telephony service, an IP PBX, or a large scale IP Centrex deployment. The SPA921 leverages industry leading VoIP technology from Linksys to deliver an upgradeable high quality IP phone that is unparalleled in features, value, and support.

Standard features on the SPA921 include a high resolution graphical display, speakerphone, and a 2.5 mm head-set port. The SPA921 supports one line with two call appearances and provides support for three way conferencing, attended call transfer, and placing a call on hold to answer an incoming call. The line can be configured as a unique phone number (or extension), or can be configured to share a number that is assigned to multiple phones.

- **Full featured one-line business class IP phone**
- **Connect directly to an Internet Telephone Service Provider or connect to an IP PBX**
- **Speakerphone. Caller ID. Call Hold, Transfer, Conferencing, and more**
- **Easy installation with secure remote provisioning. Menu based and web based configuration.**

Linksys Phone Adapter Comparison Chart

SPA Model	Voice Lines	Ethernet Ports	High Resolution Graphical Display	Power over Ethernet Support
SPA901	1	1	N	N
SPA921	1	1	Y	N
SPA922	1	2	Y	Y
SPA941	2-4	1	Y	N
SPA942	2-4	2	Y	Y

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