IP Phone

Advanced, Affordable, Feature Rich IP Telephone for Homes and Businesses

Affordable and full featured two or four line business class IP telephone

Connect directly to an Internet telephone service provider, or connect to an IP PBX

Up to four lines. Speakerphone. Caller ID. Call hold, transfer, conferencing, blocking, and more

Easy installation and secure remote provisioning. Menu based and web based configuration.

Model No.   **SPA941**

Features

- Up to Four Call Appearances with Independent Configuration and Registration - The SPA941 ships with two line appearances enabled. A two line upgrade is available via a software license key installed locally using the SPA941 web interface, or installed remotely via a secure profile update.
- Pixel Based Display: 128x64 Monochrome Graphical Liquid Crystal Display (LCD)
- Line Status - Active Line Indication, Name and Number
- Menu Driven User Interface
- Digits Dialed with Number Auto-Completion
- 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
- Call Conferencing
- Automatic Redial
- 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)
- 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
- Configurable Dial/Numbering Plan Support - per Line
- 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 Provisioning, Multiple Methods. Up to 256 Bit Encryption: (HTTP, HTTPS, TFTP)
- Optionally Require Admin Password to Reset Unit to factory Defaults
  ** Service feature availability is call feature server platform dependent.

Hardware Features

- Pixel Based Display: 128x64 Monochrome LCD Graphical Display
- Four Illuminated Call Appearance Line Buttons with Tricolor LED's
- LED Indicates Line State – Active, Idle, On-Hold, Unregistered
- Line LED Configurable to 13 Different States (On/Off, Color, Flash)
- 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

Specifications

Note: Many specifications 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 Adapter 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 v2 (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 (incl. STUN)
	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
	Adjustable Audio Frames per Packet
	DTMF: In-band & Out-of-band (RFC 2833) (SIP Info)
	Flexible Dial Plan Support with Interdigit Timers
	IP Address / URI Dialling
	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)

Security	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

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

Pyhsical Interfaces	1 10baseT RJ-45 Ethernet Port (IEEE 802.3)
	Handset: RJ-7 Connector
	Built-in Speakerphone and Microphone
	Headset 2.5mm Port

Specifications

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

Package Contents

1 - SPA IP Phone, Handset, and Stand - Color: Grey
1 - Handset Cord - 56 cm (26 in) - Color: Grey
1 - 5v Power Adapter - 1.8 m (3 ft) Cord - Color: Black
1 - RJ45 Ethernet Cable - 1.8 m (3 ft) Cord - Color: Black
1 - Quick Installation Guide

Environmental

Dimensions	7.68" x 6.30" x 7.09 " (195 mm x 160 mm x 180mm)
Unit Weight	2.15 lbs (0.9752 kg)
Operating Temp.	41º~113ºF (5º~45ºC)
Storage Temp.	-13º~185ºF (-25º~85ºC)
Operating Humidity	10~90% Non-condensing
Storage Humidity	10~90% Non-Condensing

Stylish and functional, the SPA941 VoIP telephone is designed for a residence or business using an IP PBX, a hosted IP telephony service, or a large scale IP Centrex deployment. The SPA941 leverages Linksys' industry leading VoIP technology to deliver an upgradeable, high quality IP telephone that is unparalleled in features, value, and support.

The SPA941's standard features include a graphical display, speakerphone, 2.5 mm head-set port, and two active lines. With a simple software update, the SPA941 can be upgraded to a four line phone. Each line can be independently configured to use a unique phone number (or extension), or it can be configured to use a shared number that is assigned to multiple phones.

Comprehensive Interoperability and SIP Based Feature Set

Based on the SIP standard, the SPA941 has been tested to ensure comprehensive interoperability with equipment from the communication industry's infrastructure leaders. This enables service providers to quickly roll-out competitive, feature rich services to their customers. With hundreds of features and programmable parameters, the SPA941 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 separate locations) are just some of the many advantages of the SPA941.

Carrier-Grade Security, Provisioning, and Management

The SPA941 uses encrypted protocols to provide remote provisioning, and dynamic in-service software upgrades. Linksys' secure remote provisioning solutions, which include detailed performance measurement and troubleshooting features, enable network providers to deliver high quality support to their subscribers. Remote provisioning also saves service providers the expense and hassle of managing, pre-configuring, and re-configuring customer premise equipment (CPE).

SPA941-SP-DS- 51116 KL