



# *Litescape SPAR*

*(Secure Personal Authentication Reader)*

## *Operations Guide*

Part #010835

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**Litescape SPAR Operations Guide 930221A**  
**Part # 010835**

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# Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
9. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
10. Only use attachments/accessories specified by the manufacturer.
11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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## Pictorial Alert Icons

	<p><b>General Alert</b></p> <p><i>This pictorial alert indicates a potentially hazardous situation. This alert will be followed by a hazard level heading and more specific information about the hazard.</i></p>
	<p><b>Ground</b></p> <p><i>This pictorial alert indicates the Earth grounding connection point.</i></p>

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## Hazard Levels

**Danger:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This is limited to the most extreme situations.

**Warning:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**Caution:** Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It may also alert users against unsafe practices.

**Notice:** Indicates a statement of company policy (that is, a safety policy or protection of property).

The safety guidelines for the equipment in this manual do not purport to address all the safety issues of the equipment. It is the responsibility of the user to establish appropriate safety, ergonomic, and health practices and determine the applicability of regulatory limitations prior to use. Potential safety hazards are identified in this manual through the use of words Danger, Warning, and Caution, the specific hazard type, and pictorial alert icons.

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## FCC, Class A Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

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# Revision History

Revision	Date Released	Description of Changes
A	5/14/2008	This is the first release of this manual.



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# 1 Product Overview

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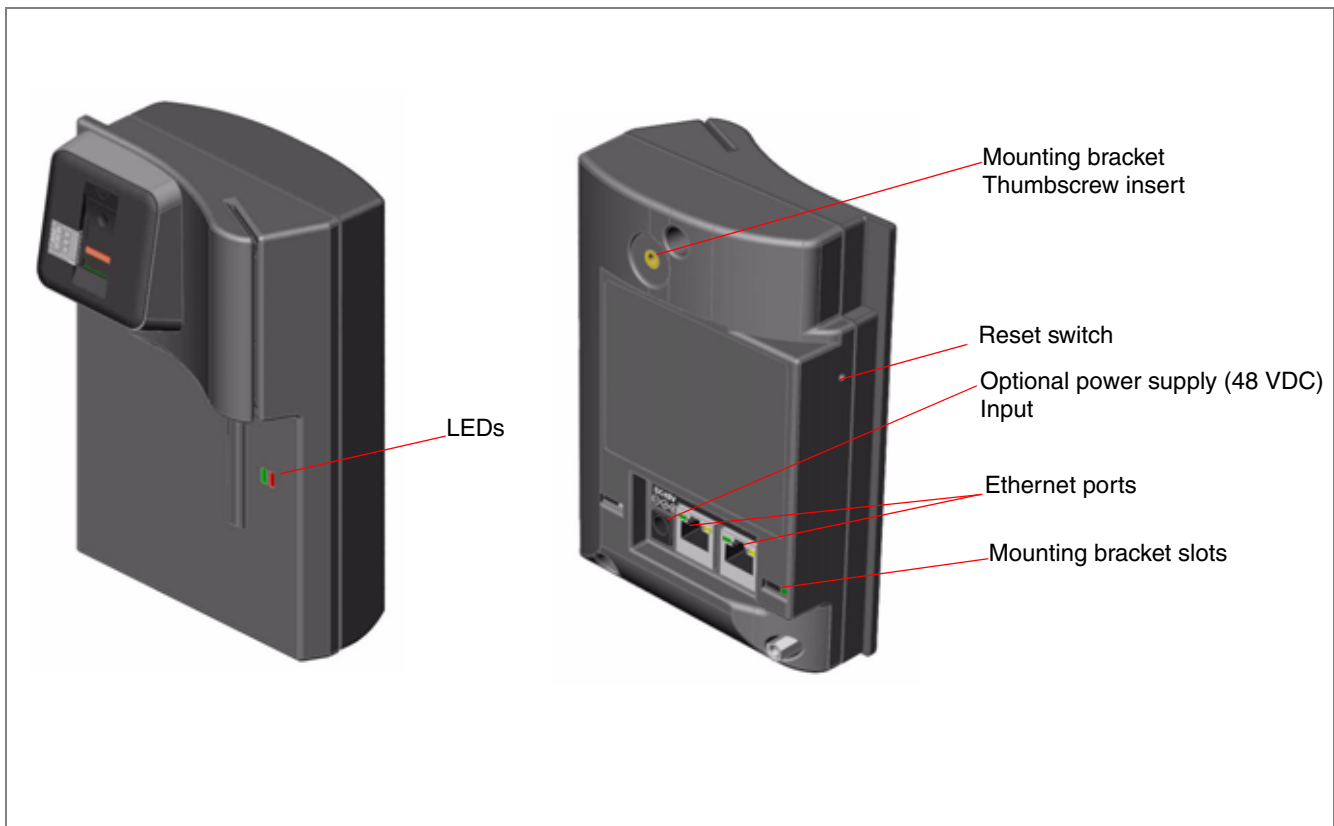
The LiteScape SPAR (Secure Personal Authentication Reader) is a small human interface device designed for encrypting security related user inputs to a network device, such as a VoIP telephone, over an IEEE 802.3 LAN connection. The LiteScape Spar consists of a microprocessor-controlled motherboard that is integrated with a network hub, a 3-track magnetic card reader, an RFID reader, and a biometric fingerprint reader.

The LiteScape Spar is powered by IEEE 802.3af standard Power over Ethernet (PoE) Endpoint/Midspan Power Sourcing Equipment (PSE) {48 VDC nominal} and enumerates as a Class 0 Powered Device (PD). As an option, you can power the LiteScape Spar by a 48VDC external power brick with a 2.5 x 5.5mm DC barrel plug which is used for powering the device when connected to a standard non-PoE LAN.

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## 1.1 Parts of the LiteScape SPAR

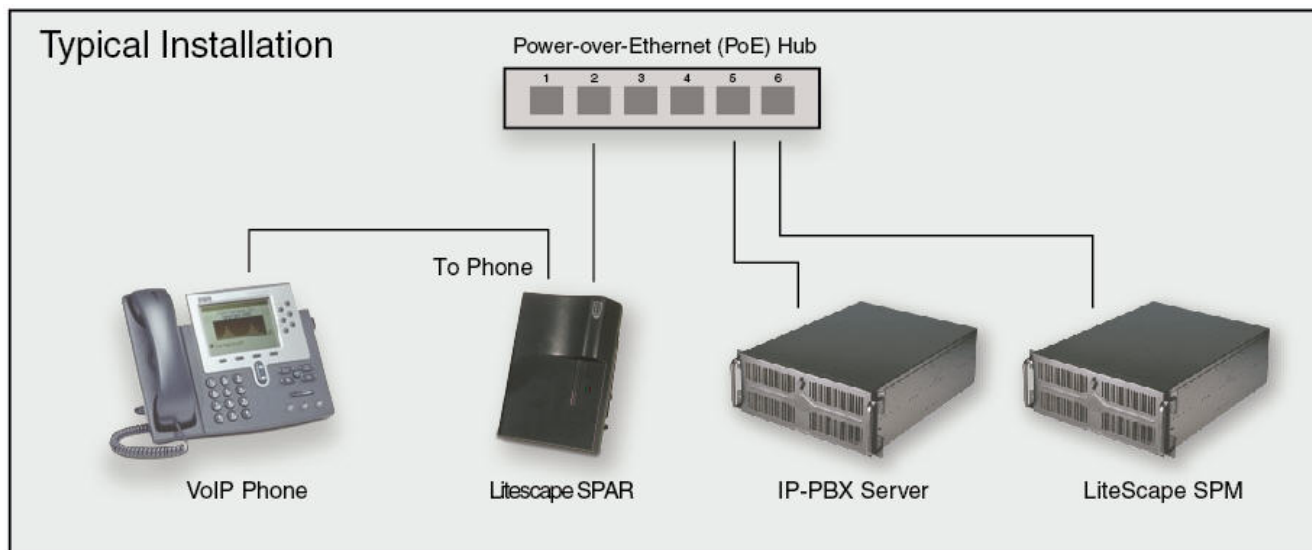
**Figure 1-1. LiteScape SPAR Parts**



## 1.2 Typical System Installation

Figure 1-2 illustrates how the LiteScape SPARs can be installed as part of a VoIP phone system.

**Figure 1-2. Typical Installation**



## 1.3 Product Features

- 3-track Magnetic Card Reader
- RFID Reader
- Pass-through Ethernet 10/100Mbps hub
- Mounts onto Cisco 7xxx series phone footstand
- Low Profile and Small Footprint
- Field upgradeable firmware
- LED indicator provides status of the reader operations
- QOS
- PoE 802.3af enabled
- Bioreader

## 1.4 Product Specifications

Category	Specification
Communications Encryption	256 bit AES
Magnetic Stripe Encoding Standard	ISO 3554
Stripe Card Standards	ISO 7810, 7811
RFID Standards	ISO15693, 4443
Power Supply	POE 802.3af or external supply +48volts DC
Interface Connections	
Hub/Network	RJ45
DC Input	2.5mm Barrel Connector (positive center)
Status Indicators	LEDs
Regulatory	FCC Class A
RoHS Compliant	Yes
Environmental	
Temperature	Operating: -30 to 55 C (-22 to 131 F) Storage: -40 to 80 C (-40 to 176 F)
Humidity	0% - 95% (non-condensing)
Software	LiteScape SPM (secure profile manager)

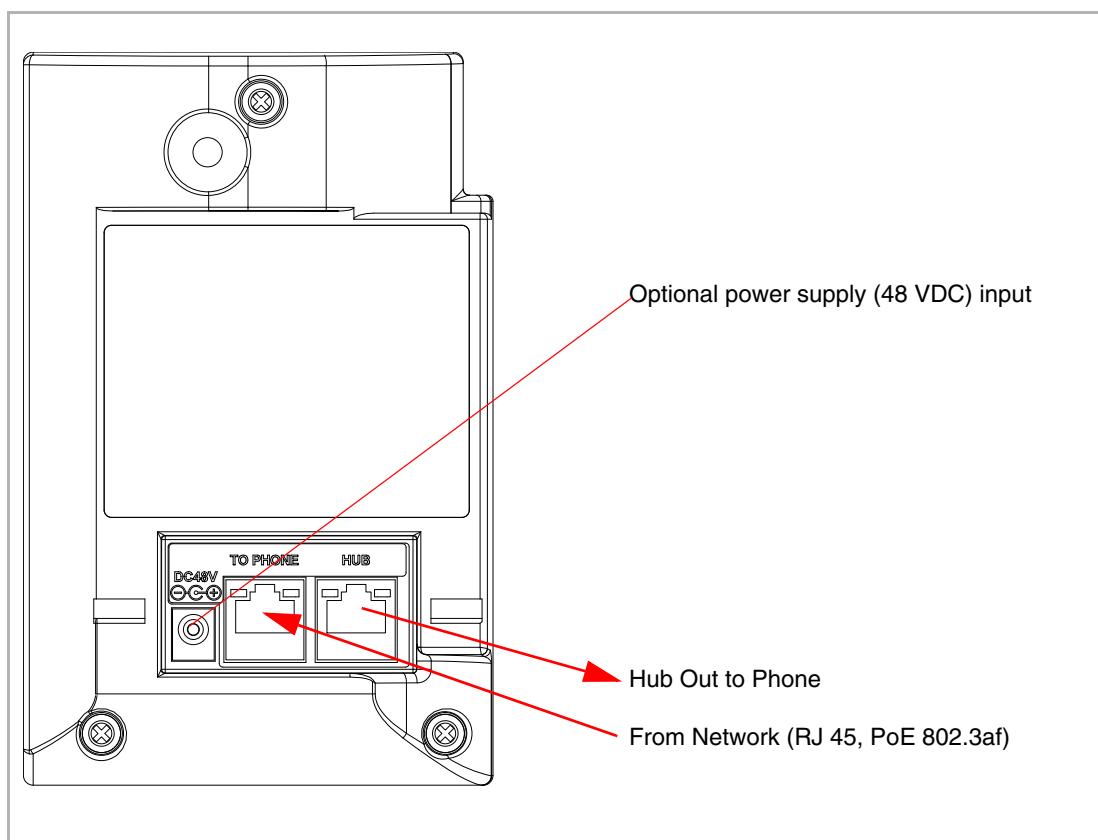


## 2 Installing the LiteScape SPAR

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Use [Figure 2-1](#) to see how to install the LiteScape SPAR.

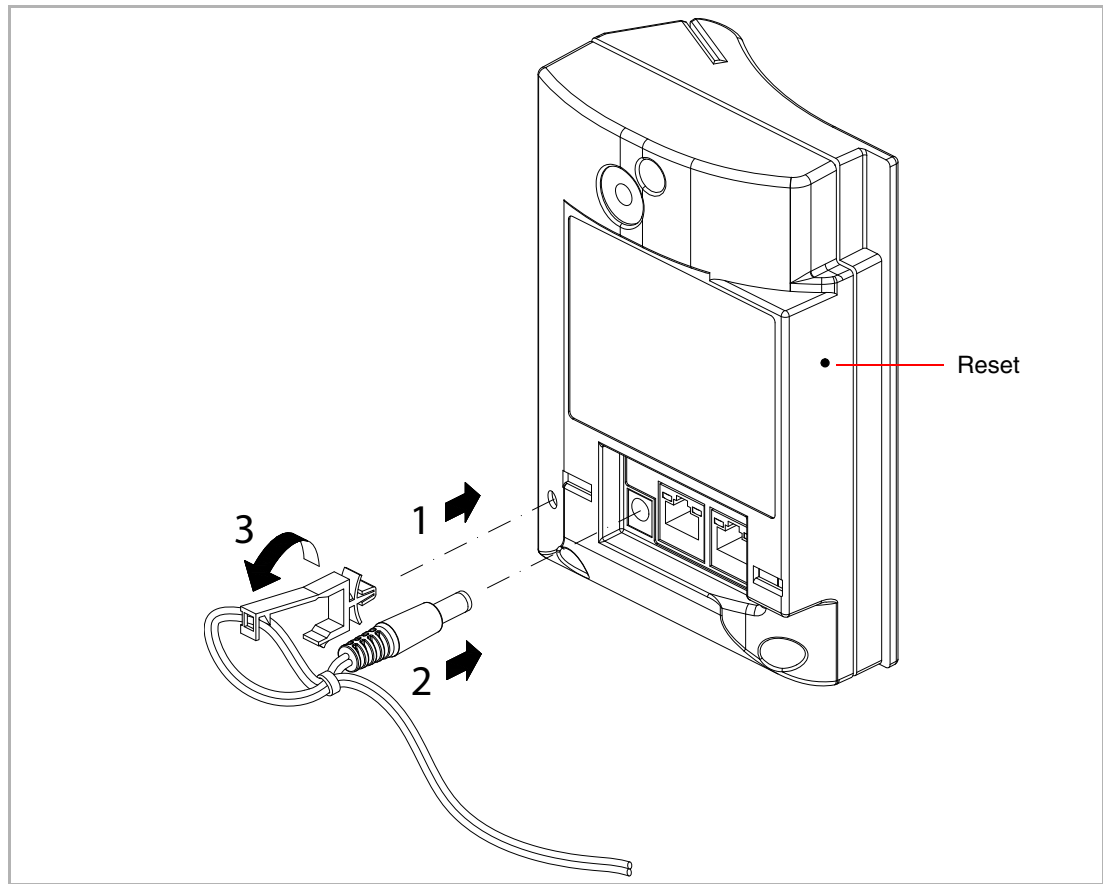
**Figure 2-1. Installing the LiteScape SPAR**



## 2.1 Using the Optional 48 Volt Power Supply Wiring

Use [Figure 2-1](#) to see how to install the LiteScape SPAR with the optional 48 volt power supply wiring.

**Figure 2-2. LiteScape SPAR With the 48 Volt Power Supply Wiring**



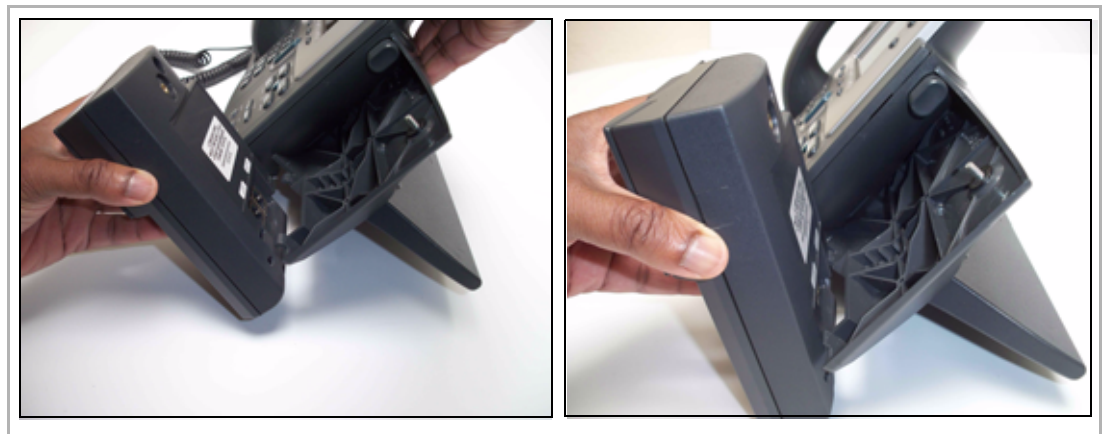
- Plug the Cable Retainer Clip into the LiteScape SPAR.

# 3 Mounting the LiteScape SPAR to a Cisco Phone Stand

## 3.1 Mounting the LiteScape SPAR to a Cisco Phone Stand

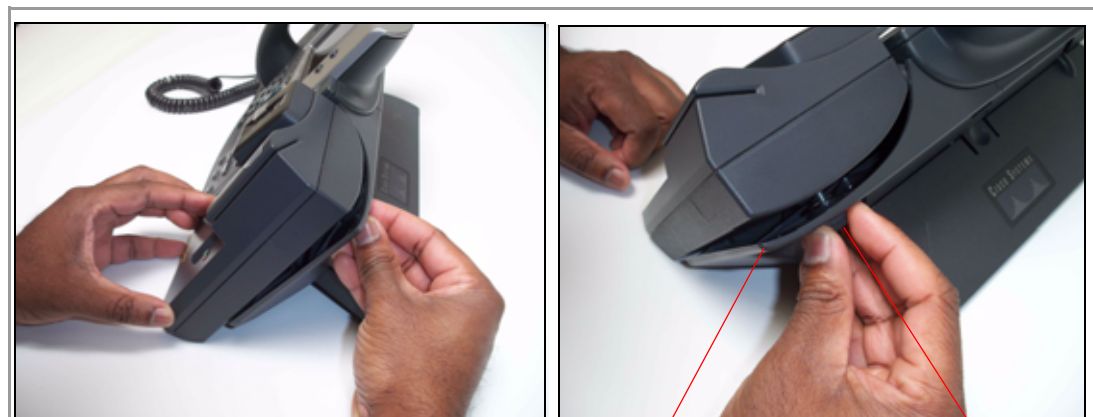
1. Position the LiteScape SPAR into the Cisco Foot Stand.

**Figure 3-1. Mounting the LiteScape SPAR**



2. Secure the LiteScape SPAR to the Cisco Foot Stand with the M4 thumb screw.

**Figure 3-2. Mounting the LiteScape SPAR**



CP-SINGLEFOOTSTAND\*

M4 thumb screw

\* The CP-SINGLEFOOTSTAND is a single module footstand for the following Cisco Phones:  
Cisco Unified IP Phones 7960G (CP-7960G), 7961G (CP-7961G) , 7970G (CP-7970G) and 7971G-GE (CP-7971G-)

- 8 Mounting the LiteScape SPAR to a Cisco Phone Stand  
Mounting the LiteScape SPAR to a Cisco Phone Stand

**Figure 3-3. Mounting the LiteScape SPAR**





## 4 Using the LiteScape SPAR

### 4.1 How to Swipe a Magnetic Card

Use [Figure 4-1](#) to see how to swipe a magnetic card.

**Figure 4-1. Swiping a Magnetic Card**



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## 4.2 How to Swipe an RFID-Tagged Card

Make sure that the RFID-tagged card is no more than 1/2-inch away as you slowly move it across the area directly below the fingerprint sensor as shown in [Figure 4-2](#).

**Figure 4-2. Swiping a RFID**



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## 4.3 How to Swipe a Fingerprint

Swipe the desired finger slowly from top to bottom across the center of the biometric scanner as shown in [Figure 4-3](#).

**Figure 4-3. Swiping a Fingerprint**





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