LS1000 VoIP Speakerphone with AXIS IP Camera: An Overview

The newest configuration of the LS1000 VoIP Speakerphone, combined with the AXIS F2105-RE Sensor & F9111 Main Unit, delivers a powerful combination of functionality & reliability to meet your Help Point® needs.

Providing a 108° field of view, good low-light performance in color, and 1080p resolution, the camera is designed to deliver clear video footage, even in rough conditions. This union of industry leading voice communication and first-class video verification will add additional layers of strength and dependability to any Code Blue ecosystem.

AXIS COMMUNICATIONS
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Important Resource Links

LS1000		AXIS F9111 Main Unit		AXIS F2105-RE Standard Sensor
				
Product Webpage	+	Product Webpage	+	Product Webpage
Product Sheet		Product Sheet		Product Sheet
Admin Guide		Admin Guide		Connection Cable
A&E Specification		All Documentation		All Documentation

Compatible Enclosures

- CB 1-e, CB 1-s, & CB 1-w
- CB 2-a*, CB 2-e, & CB 2-s
- CB 4-r*, CB 4-s Single Opening*, CB 4-s Dual Opening, & CB 4-u
- CB 5-p & CB 5-s
- CB 6-f* & CB 6-s*
- CB 9-s & CB 9-t
- CB-RT

*CB 2-a, CB 4-r, CB 4-s (single faceplate opening), and CB 6 Series enclosures ordered with the LS1000 Speakerphone including an AXIS IP camera along with Cellular Service equipment will require the use of externally mounted NEMA housing for the cellular equipment to properly function. The components will not fit in these smaller enclosures.

Primary Components

- LS1000 Speakerphone
- AXIS F9111 Main Unit
- AXIS F2105-RE Standard Sensor
- AXIS TF1201-RE Sensor Mount
- AXIS TU6004-E Cable – 1 Meter Length


F9111 Main Unit


F2105-RE Sensor


TF1201-RE Mount


TU6004-E Cable

Power Requirements

- LS1000 Speakerphone: PoE or 12VDC auxiliary power
- AXIS F9111 Main Unit: PoE or 12–24VDC

IMPORTANT NOTE: The AXIS components included with the LS1000 speakerphone are not integrated with the PCB of the speakerphone. Both the speakerphone and camera configuration require separate power sources.

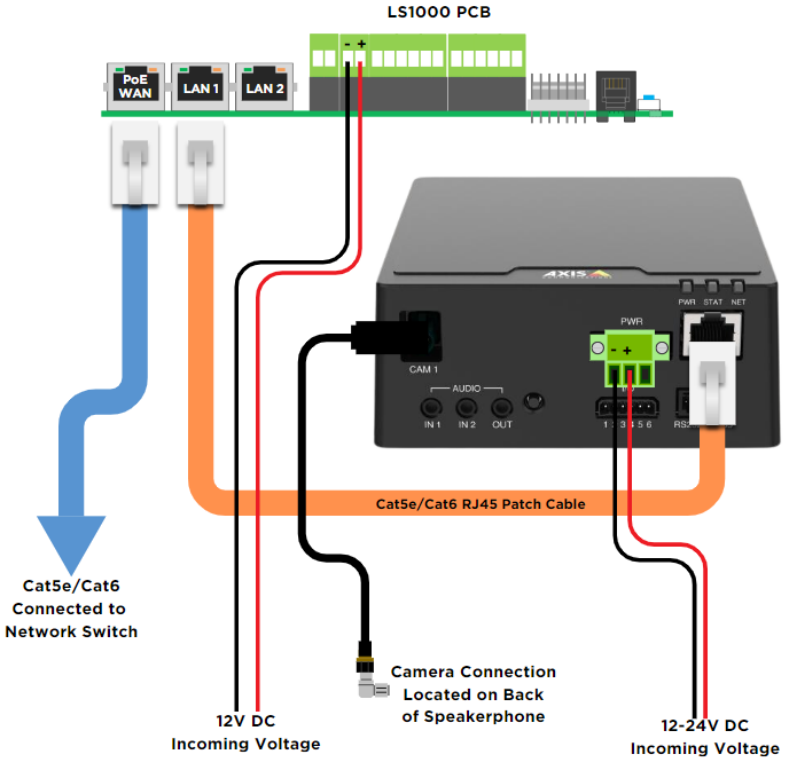
IMPORTANT NOTE: A backup battery is not offered or available for this new model due to spacing requirements for camera components.

Installation

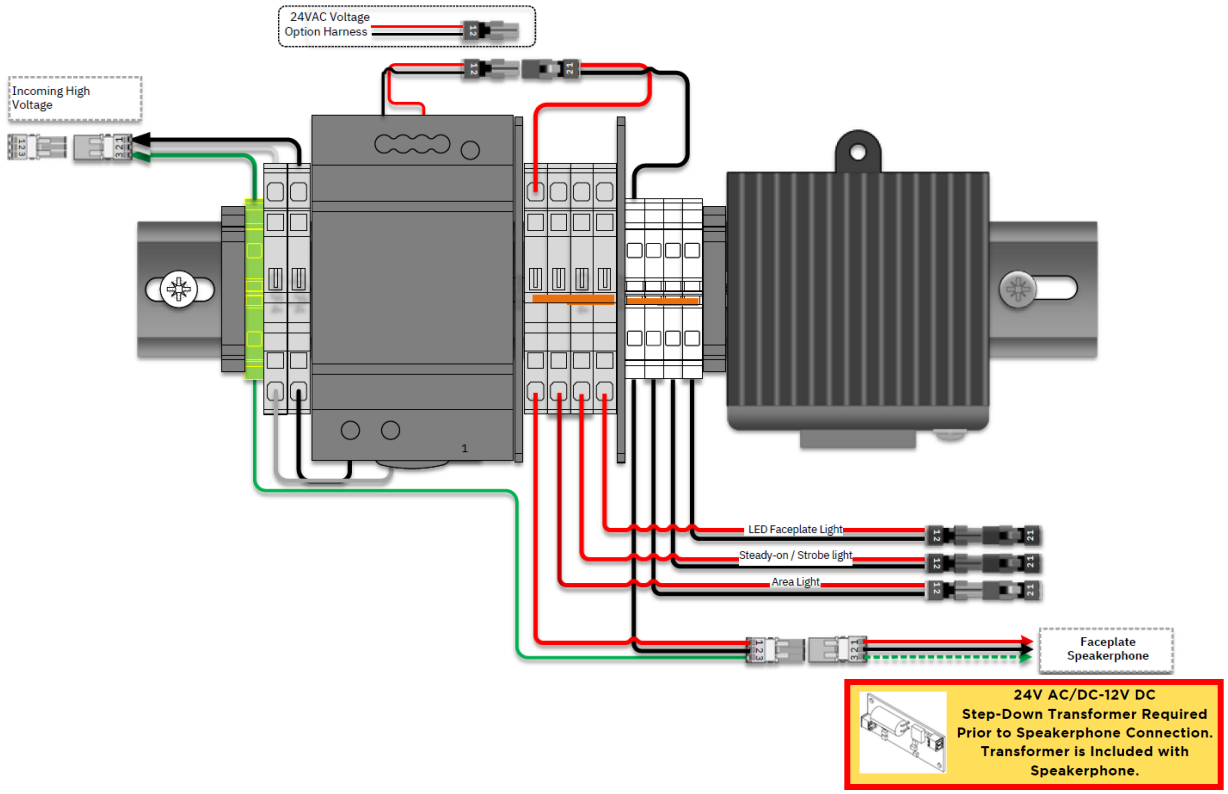
There are many possible power/communication options based on existing (retrofit) or new components. The following diagrams detail common application scenarios. Please refer to the current LS1000 Admin Guide for complete detailed instructions.

Ordering with a Code Blue Enclosure

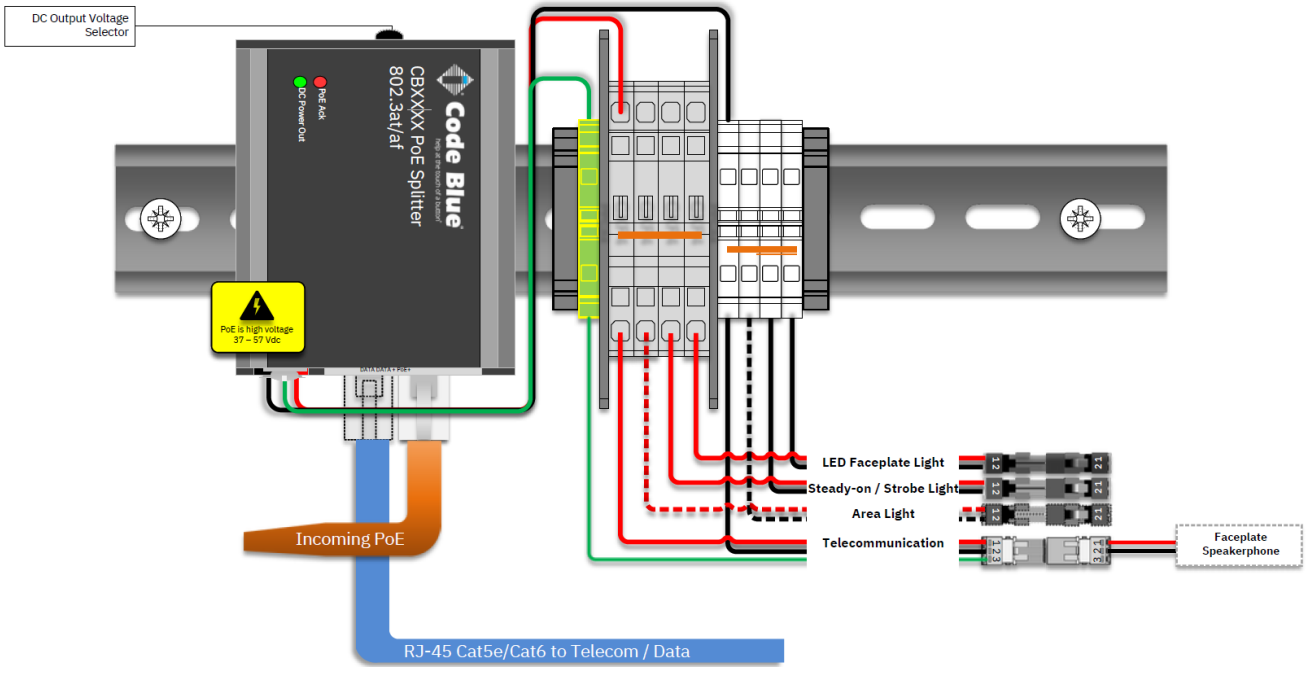
When an LS1000 with AXIS Camera Option is ordered with a new Code Blue tower or wall mounted enclosure, it will be shipped pre-installed in the enclosure and with power and communication wiring properly installed. You may need to remove the faceplate phone for programming or other installation purposes. Typical wiring of an LS1000 with AXIS Camera purchased with a new Code Blue Enclosure shown below.



Power System Type: Code Blue 24V/100-240V AC Standard DIN Rail System



Power System Type: Code Blue Power over Ethernet(PoE) DIN Rail System



Retrofitting an existing Code Blue Enclosure

Retrofitting an existing Code Blue LS1000 with AXIS Camera may require the use of additional components depending on the unit type it is being installed into along with the internal power configuration with that unit.

- AXIS F9111 Main Unit Mounting
  - The AXIS F9111 can be mounted in a variety of ways inside an existing Code Blue enclosure, depending on the unit type and space available inside. Common locations include:
    - ✓ Attaching to existing power assembly plate.
    - ✓ Using a DIN Rail mount & attaching it to existing DIN Rail system.
    - ✓ Utilizing a hanger plate.
    - ✓ Attaching to an available flat surface with the use of double sided VHB tape or weatherproof hook & loop tape
  - Full details of possible mounting locations for each Code Blue enclosure can be found on pages 17-24 in the LS1000 Admin Guide.

- AXIS F9111 Main Unit Wiring
  - The AXIS F9111 can be wired in a variety of ways inside an existing Code Blue enclosure, depending on the unit type and power system. Common Code Blue power systems include:
    - ✓ Multi-Tap Transformer/Power Brick
    - ✓ Standard DIN Rail System
    - ✓ Power over Ethernet (PoE) DIN Rail System
    - ✓ Audio Paging DIN Rail Systems
    - ✓ 3 or 5-Way Power Manifolds
    - ✓ Power over Ethernet (PoE) Non-DIN Rail System
  - Some existing power systems may require the use of additional components to function properly. Those components are available via the following part numbers:

Power System Type	Part #	Components
120-347VAC Multi-Tap Transformer/Power Brick	41005	Step Down Transformer, 2-Pin Connectors, & Wire Harness w/ Wago Connectors.
24/100-240VAC Standard DIN Rail System	41001	Step Down Transformer, 2-Pin Connector, Fused DIN Rail terminal Block, DIN Rail Buss Block, 2-Pin Jumpers, & Wire Harness w/ 2-Pin Connection.
PoE DIN Rail System	41002	PoE Splitter w/ PoE Passthrough, DIN Rail Mount, 2-Pin Wago Conversion Kit, & Cat6 Patch Cable.
Audio Paging DIN Rail System	41003	Fused DIN Rail terminal Block, DIN Rail Buss Block, & 2-Pin Jumpers.
3 or 5 -Way Power Manifolds	41006	Step Down Transformer, 2-Pin Connectors, & Wire Harness w/ Wago Connectors.
PoE non-DIN Rail Systems	41007	PoE Splitter w/ PoE Passthrough, 2-Pin Wago Conversion Kit, & Cat6 Patch Cable.

Complete details, instructions, & wiring diagrams for AXIS F9111 Main Unit can be found on pages 25-41 in the LS1000 Admin Guide.

Feature Comparison

The table below details some key differences between the features offered in the new LS1000 with AXIS Camera compared to the Legacy LS1000 Camera option.

Feature	LS1000 w/ AXIS Camera	Legacy LS1000 Camera	Notes
Wide Dynamic Range (WDR)	Forensic WDR	None	Improved image quality in high-contrast lighting conditions where dimly & brightly lit areas are in the camera's field of view.
Resolution	-Up to 30fps @ 1080p (WDR Mode) -Up to 60fps @ 1080p -Up to 180fps @ 720p	-30fps @ 1080p -60fps @ 720p	Increased image quality and clarity. Smoother recording playback.
Field of View	108 °	125 °	Now aligned with typical security camera standards. Less image distortion.
Compression	Zipstream, H.264, H.265, Motion JPEG	H.264, Motion JPEG	Allows higher video quality at lower bitrates, improving bandwidth consumption on the network.
Image Settings	Contrast, brightness, sharpness, white balance, exposure control, rotation, tone mapping, compression, resolution.	Compression & resolution.	Increased number of settings allowing for high quality operation in almost any environment/lighting condition.

Available Configurations

New Part Numbers (includes AXIS IP Camera)	Description	Legacy Part Numbers (now obsolete)
71001	LS1000-SC AXIS Camera Phone	70001
71004	LS1000-SEC AXIS Camera Phone	70004
71007	LS1000-SAC AXIS Camera Phone	70007
71010	LS1000-SC AXIS Camera Phone CC	70010
71013	LS1000-SEC AXIS Cam Phone CC	70013
71016	LS1000-SAC AXIS Cam Phone CC	70016
71002	LS1000-DC AXIS Camera Phone	70002
71005	LS1000-DEC AXIS Camera Phone	70005
71008	LS1000-DAC AXIS Camera Phone	70008
71011	LS1000-DC AXIS Camera Phone CC	70011
71014	LS1000-DEC AXIS Cam Phone CC	70014
71017	LS1000-DAC AXIS Cam Phone CC	70017
71003	LS1000-KC AXIS Camera Phone	70003
71006	LS1000-KEC AXIS Camera Phone	70006
71009	LS1000-KAC AXIS Camera Phone	70009
71012	LS1000-KC AXIS Camera Phone CC	70012
71015	LS1000-KEC AXIS Cam Phone CC	70015
71018	LS1000-KAC AXIS Cam Phone CC	70018

Frequently Asked Questions (FAQ):

Availability

Q: What is the lead time for LS1000 with AXIS IP camera?

A: 4 weeks

Q: Am I still able to purchase the legacy LS1000 with camera model?

A: Our legacy camera component will only be available in Centry® units going forward unless a custom design is requested and approved.

Pricing

Q: Is the new LS1000 with AXIS IP camera higher in cost than the legacy model? If so, why?

A: Yes, the newer design is higher in cost when compared to the legacy LS1000 with camera model. The AXIS IP camera main unit and sensor combination is far superior to the legacy camera used in LS1000 assemblies. We feel the high-quality video (even in challenging and low light conditions), integration capability, reputation, etc. justifies the added cost.

Connectivity

Q: What are the connectivity options for each scenario? Twisted pair, fiber, no cable available, etc.

A: Wiring Diagrams for new installs & retrofits are included in the current LS1000 Admin Guide.

Q: Can I retrofit existing enclosures with the new LS1000 with AXIS IP camera?

A: Yes, the faceplate is compatible with new and existing enclosures. Please refer to page 5 of this document or pages 16-41 of the LS1000 Admin Guide for more information.

Video options

Q: Which video compression formats are supported?

A: Multiple, individually configurable streams in H.264, H.265, and Motion JPEG are supported.

Q: What are the supported frame rates?

A: Up to 30 fps for 1080p (WDR mode), up to 60 fps for 1080p, and up to 180 fps for 720p

Q: Does the new LS1000 with AXIS IP camera offer an API?

A: The AXIS F9111 main unit supports ONVIF® Profile G and ONVIF® Profile S.

Q: Are alternate lenses available if requested?

A: The only other option that AXIS offers that fits in the current mount is the F2135-RE Fisheye lens. If requested we can order it; however, we will only be able to provide a lead time at the time of request/order. The other models of lenses compatible with the F9111 Main unit (F2115-R, F4105-LRE, & F7225-RE) all require different mounting accessories that would require a custom designed faceplate to accommodate them.

Q: How does the lens mount into the faceplate?

A: The lens is connected to the faceplate using an AXIS TF1201 recessed mount.

Q: Does the AXIS main unit support edge storage?

A: The F9111 main units support microSD/microSDHC/microSDXC card and encryption. For SD card recommendations, refer to the manufacturer's webpage.

Q: Can video still be streamed to a desk phone?

A: Yes, video can be streamed to a desk phone which supports Real-Time Streaming Protocol (RTSP).

Q: Can I stream video to a desk phone and video management system simultaneously?

A: Yes, multiple video streams and protocols are supported.

X = compatible

Configuration (LS1000 or Centry)	Voice calls to Desk Phone				Video stream to Desk Phone*			
	RTSP	Peer-to-Peer	SIP	ONVIF	RTSP	Peer-to-Peer	SIP	ONVIF
ToolVox XS (appliance)		X	X		X			
ToolVox XV (VM application)		X	X		X			
Nebula (cloud)			X		X			
No ToolVox or Nebula (3rd party SIP platform)		X	X		X			

**Assumes video desk phone is provided by Code Blue. Protocols supported when routing video to a video management system depend on that system's capabilities.*

Power

Q: What are the power requirements for new units and retrofit situations?

A: LS1000 requires the use of PoE or 12V DC. The F9111 Main Unit requires PoE OR 12-24VDC. Wiring diagrams for new & retrofit scenarios are available in the LS1000 Admin Guide.

IMPORTANT NOTE: The AXIS components included with the LS1000 speakerphone are not integrated with the PCB of the speakerphone. Both the speakerphone and camera configuration require separate power sources.

Compatibility

Q: Which Code Blue housings will accommodate the new faceplate/control unit combination?

A: See list on page 2 of this document.

Warranty

Q: Are we honoring Code Blue's standard LS1000 warranty?

A: Our standard 2 Year Warranty will apply to the speakerphone and AXIS components included. Any service required exclusively to the AXIS components beyond that 2 Year period will need to be handled directly with AXIS, not through Code Blue.

Support

Q: Is top-level support going to be provided by Code Blue with AXIS handling escalations?

A: Code Blue will be the first level of technical support and escalate if required.

Integration

Q: Are we able to trigger events and stream video when a Code Blue button is activated (call placed)?

A1: If LS1000 or Centry camera is connected to Code Blue's Blue Alert Motion platform, event-based recording is a standard feature.

A2: If event-based events are required from a 3rd party platform, Code Blue's API is available. Please email technicalsupport@codeblue.com with integration inquiries.

Nebula/Blue Alert

Q: What are my Nebula options/requirements when purchasing the LS1000 w/ AXIS Camera?

A1: Managed Nebula

- Voice & Video connected to Code Blue's Nebula (cloud) platform.
- Blue Alert Motion is required & will act as the VMS for the video.
- End-user customer will access live & recorded video through

https://motion.codeblue.com/.
- Required Equipment (one or both):
  - ✓ Peplink Mini inside enclosure for one-to-one deployments.
  - ✓ Balance Router on wired WAN for one-to-many deployments.

A2: Consumer Nebula

- Managed or Unmanaged
- Allow voice & video to go to BOTH Code Blue services and/or the end-user customer's network.
- End-user customer will access live & recorded video through https://motion.codeblue.com/ (with active BA Motion subscription), their video management system, or a combination.
- SIP info can go to Nebula, Local PBX, or both.
- Required Equipment (one or both):
  - ✓ Peplink Mini inside enclosure
  - ✓ Smallest Balance Router on End User Network

A3: Private/Hybrid Nebula

- Allows voice and video to be transmitted using different tunnels.
- Voice can come to Code Blue, while video routes to the end-user customer's network, or vice versa.
- Can be used just as a wireless connection back to the end-user customer's network only. No Services from Code Blue in this case, only hardware.
- Required Equipment:
  - ✓ Determined on a case-by-case basis.
  - ✓ May require Enterprise-sized Balance Router and/or special programming depending on the situation.