



## FAQ Document



### Aastra S850i Conference Phone

The Aastra S850i is a SIP-based wireless conference phone that delivers a new level of freedom and flexibility for audio and video conferencing.

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## 1 Executive Summary

We are pleased to announce the release of the Aastra S850i wireless conference phone. Designed specifically for use in conference rooms, boardrooms, and executive offices, the S850i redefines the traditional conference call experience giving users unprecedented freedom with respect to placement and accessibility of the speaker, microphone and handset dialer. Supporting wideband audio technology and the latest in secure wireless audio technology, the S850i delivers superior sound quality and performance meeting all your audio and video conferencing needs.

## 2 FAQ Scope

This FAQ is focused on the S850i conference phone.

### 2.1 S850i Conference Phone Product Questions

#### 2.1.1. What is the S850i?

S850i is Aastra's premium conference phone designed for use in conference rooms, boardrooms and executive offices. The S850i consists of multiple wireless components: 1 handset dialer, 2 omnidirectional microphones, and a wireless speaker. It also contains a charger tray (for charging the handset dialer, 2 microphones and the wireless speaker), and a wireless base unit which can be placed at remote location inside the room. The S850i conference phone is also sold as part of the Blustar for Conference Room solution.

#### 2.1.2. Why are there two SKU's of the S850i

The S850i is available in two DECT frequencies; DECT 6.0 (1920-1930MHz) mainly used in North America and South America and DECT ETSI ETS 300 175 (1880 – 1900 MHz) generally used in Europe, Asia, Australia, New Zealand and Africa. Spares and Accessories are universal.

#### 2.1.3. What are the key elements of the S850i?

- Flexibility: speaker, microphones and dialer are completely wireless
- Superior audio quality: omni microphones capture voice from 360° unlike directional microphones which only capture voice from one direction. Also, the product is immune to GSM interference, and has acoustic echo canceller. These features enable users to have smooth and natural conversations.
- Dialer: Users can place private calls or conference calls, and switch between the two with one touch toggle
- Minimal space requirement: speaker only requires 4"x4" space

#### 2.1.4. What is HD Audio?

HD audio refers to high voice quality due to codec G.722 and S850i's DECT frequency of up to 11 KHZ audio. The high bandwidth due to codec G.722 (7kHz) between the wireless base unit and communication server & DECT bandwidth of 11 kHz between wireless base unit and speaker/microphones allows for a high voice quality.

#### 2.1.5. What is Bluetooth EDR?

Bluetooth EDR was first introduced with Bluetooth 2.0, and refers to *Enhanced Data Rate* - a more advanced, improved performance type of Bluetooth. EDR makes the Bluetooth connection 2-3 times faster than previous Bluetooth connections and Bluetooth 2.1+EDR is built to be more secure.

#### 2.1.6. What is Bluetooth used for in the S850i?

Bluetooth technology allows users to make conference calls directly from their Bluetooth enabled devices while using the S850i's wireless speaker and microphones. There are also certain PC applications which can connect to S850i using Bluetooth.

### **2.1.7. What is Acoustic Echo Cancellation (AEC)**

AEC is the process applied to the telephone call which prevents far end participants from hearing the echo of their own voices (which would otherwise result from voice transmitted from the speaker back into the microphones).

### **2.1.8. What is Adaptive Jitter Buffers**

Adaptive Jitter Buffers provide frames in proper order, even if the packet arrivals are not in order to maintain good quality and low latency.

### **2.1.9. What is audio filter**

S850i has an automatic audio filter which filters out unwanted audio frequencies.

### **2.1.10. Is S850i compatible with video conferencing?**

Yes, it is compatible with Aastra's Blustar for Conference Room Solution as well as other standard video conferencing solutions. Additional cabling may be required when used with third party solutions.

### **2.1.11. Is S850i compatible with PC applications?**

Yes, S850i is compatible with PC applications, such as Blustar for PC by Aastra as well as other 3<sup>rd</sup> party applications. Users must purchase an additional USB connector kit which includes a USB audio dongle, and 2 auxiliary audio cables.

### **2.1.12. Does the Wireless Base Unit and Charger Tray need to be placed beside each other?**

The wireless base unit and charger tray should be placed in the same room, but are not required to be placed directly beside each other. The wireless base unit should be placed close to an Ethernet port as it is Powered over Ethernet (PoE). The charger tray should be placed next to an outlet where convenient to return or use the S850i components during calls.

### **2.1.13. How many microphones can be paired with the S850i conference phone system?**

Only 2 microphones may be used with each S850i conference phone system.

### **2.1.14. How many Speakers can the S850i support**

The S850i can support up to 2 speakers. An additional charger tray is required to charge the second speaker.

### **2.1.15. What is the lapel (wearable) microphone?**

The optional lapel microphone can be purchased separately, and it allows presenters and moderators to leave the table and still be clearly heard. The lapel microphone is equipped with a rotatable clip ideal for attaching to a lapel or shirt.

### **2.1.16. Speaker stops working for a few seconds when placing the speaker in charger during a call**

When the speaker is placed into the charger during an active call, the speaker will reboot and enter its charging mode. During the reboot, the incoming audio from the conference call will mute until the reboot is complete (approximately 6 seconds).

### **2.1.17. What are the USB ports used for during the software upgrade?**

Software upgrade requires 3 steps: updating the system software, upgrading/installing Bluetooth in Wireless base unit (rarely) and upgrading/installing Bluetooth in handset dialer each time a software upgrade is conducted.

#### **Wireless base unit**

Port A: for system software upgrade

Port B: upgrade/install Bluetooth in Wireless base unit (for Bluetooth compatibility with cell phones, PC applications, etc)

#### **Charger Tray**

Port: upgrade/install Bluetooth in handset dialer (ensure handset dialer is placed inside charger tray during the process)

### **2.1.18. What the second AUX OUT port used for?**

The second AUX OUT is for connectivity with units such as a recorder.

### **2.1.19. What is the default password to access both the web interface and the Admin settings on the handset dialer?**

The default password is 2222 and may be changed to a custom 4-digit code.

### **2.1.20. How to enable web access**

In the case where web access is disabled, from the handset dialer select:  
Menu>Setup>Advanced Setup>Admin Settings>Web Access (set to ON)

### **2.1.21. How to disable the Recent Call list**

From the handset dialer select:

Menu>Setup>Advanced Setup>Admin Settings>Recent Calls (set to OFF)

### **2.1.22. What is the pin for Bluetooth**

If prompted for a pin when adding a Bluetooth device (through the dialer), type '0000' (default)

### **2.1.23. My cell phone has Bluetooth but it does not work with S850i**

S850i only works with Bluetooth 2.0 and newer.

**2.1.24. Can the admin configure the desired phone settings/options for one terminal and mirror the settings for all other terminals?**

Yes, S850i allows for configuration import / export.

**2.1.25. Resetting a forgotten admin password**

Admin needs to provide Aastra with the conference phone's MAC address. Aastra will then coordinate resetting the password to its default.

**2.1.26. Is the phonebook compatible with the global corporate directory**

No, the S850i has a user-configurable local phonebook, and users can store up to 100 contacts.

**2.1.27. LED indicators:**

Device LED Indicator	Status
<b>Microphone in Charger tray</b>	
Steady Red	Charging
Steady Green	Fully charged
Single red flash	Active phone call, both microphones in Charger tray, microphones muted via Master Mute or All Mic Mute is ON
Double red flash	Active phone call, microphone(s) in Charger tray, microphone is muted
Green flash	Active phone call, microphone in Charger tray is unmuted
Off	Microphone is powered off: <ul style="list-style-type: none"> <li>○ Microphone is not seated properly</li> <li>○ Charger Tray is powered off</li> <li>○</li> </ul>
<b>Microphone not in Charger tray</b>	
Off	Microphone is powered off
Single green flash every second	On, connected, battery charged, un-muted
Two Red flashes every second	On, connected, battery charged, individually muted
Red flash every second	On, connected, battery charged, Master Mute or "All Mic Mute" is ON, microphones muted
Alternating Yellow - Green flash	On, connected, battery low, un-muted
Alternating Yellow - Double-Red flash	On, connected, battery low, individually muted
Alternating long Red - Yellow flash	On, connected, battery low, Master Mute or "All Mic Mute" is ON, microphones muted
Flashing Yellow – Red – Yellow – Green	Searching for a connection to the base. <i>The microphone will try to re-establish the link for 10 minutes, then power off</i>
Alternating slow Red - Green flash	Microphone is not paired to Wireless base unit <i>The microphone will power off after two minutes</i>
Steady Red	<ul style="list-style-type: none"> <li>○ Microphone is being powered down</li> <li>○ Microphone is in pairing mode</li> </ul>
Groups of five rapid Red flashes	Microphone is in a fault condition

Device LED Indicator	Status
<b>Speaker in Charger tray</b>	
Steady Green	<ul style="list-style-type: none"> <li>○ Connected, battery charging, no phone call in progress, Microphones in Charger tray</li> <li>○ Connected, battery charging, phone call in progress, Microphones are not muted using All Mic Mute or Master Mute. Microphone(s) might still be individually muted</li> <li>○ Connected, battery charging, no phone call in progress, Microphone(s) outside of the Charger tray unmuted</li> </ul>
Steady Red	<ul style="list-style-type: none"> <li>○ Connected, battery charging, phone call in progress, Master Mute or "All Mic Mute" is ON, all Microphones are muted</li> <li>○ Connected, battery charging, no phone call in progress, Microphone(s) outside of Charger tray, "All Mic Mute" is ON, all Microphones are muted</li> </ul>
Green flash every second	<ul style="list-style-type: none"> <li>○ Connected, battery fully charged, no phone call in progress, Microphones in Charger tray</li> <li>○ Connected, battery fully charged, phone call in progress, Microphones are not muted using All Mic Mute or Master Mute. Microphones might still be individually muted</li> <li>○ Connected, battery fully charged, no phone call in progress, Microphone(s) outside of the Charger tray unmuted</li> </ul>
Red flash every second	<ul style="list-style-type: none"> <li>○ Connected, battery fully charged, phone call in progress, Master Mute or "All Mic Mute" is ON, all Microphones are muted</li> <li>○ Connected, battery fully charged, no phone call in progress, microphones outside of Charger tray, "All Mic Mute" is ON, all Microphones are muted</li> </ul>
Flashing Yellow* – Red – Yellow* – Green	Searching for a connection to the Wireless base unit
Alternating slow Red - Green flash	Speaker is not paired to Wireless base unit
Off	Speaker is powered off: <ul style="list-style-type: none"> <li>○ Speaker is not seated properly</li> <li>○ Charger tray is powered off</li> </ul>
<b>Speaker not in Charger tray</b>	
Off	Speaker is powered off
Green flash every second	<ul style="list-style-type: none"> <li>○ Connected, no call in progress, Microphones in Charger tray</li> <li>○ Connected, no phone call in progress, Microphone(s) outside of the Charger tray unmuted</li> <li>○ Connected, call in progress, Microphones are not muted using AllMic Mute or Master Mute</li> <li>○ Microphone(s) might still be individually muted</li> </ul>
Red flash every second	<ul style="list-style-type: none"> <li>○ Connected, phone call in progress, Master Mute or "All Mic Mute" is ON, all microphones are muted</li> <li>○ Connected, no phone call in progress, Microphone(s) outside of Charger tray, "All Mic Mute" is ON, all Microphones are muted</li> </ul>
Alternating Green – Yellow* flash	<ul style="list-style-type: none"> <li>○ Connected, battery low, no call in progress</li> <li>○ Connected, battery low, call in progress,</li> </ul>

Device LED Indicator	Status
	Microphones are not muted using All Mic Mute or Master Mute. Microphone(s) might still be individually muted
Alternating long Red – Yellow* flash	<ul style="list-style-type: none"> <li>○ Connected, battery low, no call in progress, “All Mic Mute” is ON, all Microphones are muted</li> <li>○ Connected, battery low, call in progress, Master Mute or “All Mic Mute” is ON, all Microphones muted</li> </ul>
Flashing Yellow* – Red – Yellow* – Green	Searching for a connection to the base <i>The speaker will try to re-establish the link for about 10 minutes, then power off.</i>
Alternating slow Red - Green flash	Speaker is not paired to Wireless base unit <i>The speaker will power down after two minutes.</i>
Steady Red	<ul style="list-style-type: none"> <li>○ Speaker is being powered down</li> <li>○ Speaker is in pairing mode.</li> </ul>
Groups of five rapid Red flashes	Speaker is in a fault condition.
Device LED Indicator	Status
Wireless base unit	
Long solid on, then a long solid off	Power On Boot Process
Double flashes every second	Operating Mode indicating that Wireless base unit is functional.
Skip every fifth double flash	Fault indication. This also indicates past faults that have no bearings on current operation
Continuous Fast Flashing	Updating non-volatile memory as part of software update
Off	No Power

\* In some Speakers the LED Indicator color Yellow might look like Red.

## 3 Glossary

### **BluStar or BluStar Ecosystem:**

- The term BluStar or BluStar Ecosystem refers to Aastra's new portfolio of unified communication & collaboration (UCC) clients, which consists of different software and hardware based components.

### **BluStar for Conference Room**

- BluStar for Conference Room is a versatile video conferencing solution for medium to large boardrooms or conference rooms. Supporting an external HD camera, HD capable displays or projectors and audio options, the BluStar for Conference Room Codec provides a powerful and flexible communication and collaboration solution to meet the needs of modern businesses.

### **BluStar 8000i Desktop Media Phone:**

- Desktop Media Phone supporting video conferencing in true HD 720p. Simultaneous multi-way video conferencing, screen sharing, business applications, hot desking and more. All from a dedicated desktop device proving a high quality video collaboration.

### **BluStar for PC:**

- The BluStar for PC Client delivers high-quality audio, video and access to a set of UC features from a single client on the desktop. Its intuitive interface unifies voice communications with HD video, instant messaging, corporate directory look-up with flexible search options, communication history.

### **BluStar for iPad/iPhone:**

- The BluStar for iPad client provides voice and video calling for the iPad and iPhone providing connectivity while on the move. Utilising the devices' WiFi connection, video/voice calling is made easy with this sleek easy to use application available as a free download from the Apple app store. Also able to use GSM/LTE data connection.

### **BluStar Application Server (BAS)**

- BluStar Application Server (BAS) is the base component required to provide an independent videoconferencing infrastructure. The BAS provides unique features within the BluStar portfolio such as; bandwidth management, Desktop/Screen sharing function, multi-way conferencing.
- BAS can be used alternatively to a communication server.
- Today there is no connection between other communication servers and the BAS. Devices used with the BAS will have separate number plan. Devices need to be connected to the same BAS to be able to interop with each other

### **BluStar Server**

- BluStar Server will come into the BluStar portfolio with a later release of BluStar for PC and subsequently with all BluStar client and devices.
- The main feature of BluStar Server is the presence engine, which allows the addition of rich presence information (calendar presence, line state, manual presence, Lync presence) to BluStar clients and devices (roadmap).

## Acronyms

AD	Active Directory
AEC	Automatic Echo Canceling
AGC	Automatic Gain Control
BAS	BluStar Application Server
CMG	Contact Management Suite
DNS	Domain Name System
DTMF	Dual Tone Multiple-Frequency
HD	High Definition
LAN	Local Area Network
LDAP	Lightweight Directory Access Protocol
PSTN	Public Switched Telephone Network
RFB	Remote Framebuffer Protocol
RFC	Request For Comments
RTP	Real-time Transport Protocol
SBC	Session Border Controller
SDP	Session Description Protocol
SDK	Software Development Kit
SIP	Session Initiation Protocol
SP	Service Pack
UCC	Unified Communication and Collaboration
XML	eXtensible Markup Language

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