



## Aastra Hi-Q™ audio technology for 67xxi SIP phones: FAQ

Aastra  Hi-Q™

### 1. What is Aastra Hi-Q audio technology?

Aastra Hi-Q audio technology has been developed by Aastra to deliver enhanced performance and voice clarity for its 67xxi series of SIP phones. Incorporating wideband audio technology, Aastra Hi-Q significantly improves the audio quality of calls offering a truly superior voice experience.

Aastra's Hi-Q audio is a software based acoustic optimization, backwards compatible with existing 67xxi series SIP phones, delivering a more life-like conversation and richer user experience via an industry standard G.722 wideband codec.

### 2. Is Hi-Q the same as HD voice?

No. Both HD voice and Hi-Q are all about an enhanced user experience. The Aastra Hi-Q offer was specifically designed to greatly enhance the user experience leveraging the existing embedded base of Aastra IP phones while not affecting the existing hardware design or price for the existing family of phones. HD voice requires an optimization of the software working with the G.722 codec (like Hi-Q) and making specific changes to the audio hardware (telephone handset and speaker phone). In the future, as Aastra introduces new hardware, all aspects of HD voice will be integrated into the design.

In summary the Hi-Q experience greatly enhances the user experience at the same price the customers are paying for the existing devices. Try it for yourself and see!

### 3. What phone models support Aastra Hi-Q?

All Aastra 67xxi SIP phones, with software release 2.5.0 or later, can take advantage of Aastra Hi-Q audio technology. It is incorporated into the firmware available for: 6757i CT, 6757i, 6755i, 6753i, 6751i, 6731i, 6730i

Aastra Hi-Q is not available for other SIP models, such as 9143i, 9480i, 9480i CT or Aastra's Response Point (RP) series of SIP phones.

### 4. How do I use Aastra Hi-Q?

Aastra Hi-Q technology works together with G.722 wideband codec. Whenever G.722 codec is successfully negotiated, then Aastra Hi-Q audio technology will be applied to the voice path. Aastra phones and the controlling Call Server/PBX will need to be configured to support G.722. Aastra Hi-Q can be used between any 67xxi model and any other device capable of supporting G.722.

### 5. Is Aastra Hi-Q optional or always on?

Aastra Hi-Q technology incorporates G.722 wideband codec. Whenever G.722 is used, Aastra Hi-Q technology is applied to enhance the voice path and enable users to experience the unrivaled clarity and an even more life-like conversation. G.722 is configurable on Aastra SIP phones and will only be used when both calling and called parties successfully negotiate the use of G.722. Aastra Hi-Q can be used between Aastra 67xxi SIP phones and any other device that supports G.722 codec.

## 6. How do I configure Aastra Hi-Q on supporting models?

Aastra Hi-Q works in conjunction with G.722 wideband codec. By configuring the use of G.722 you automatically configure Aastra Hi-Q.

*Note: The G.722 wideband codec is available on Aastra SIP phones running release 2.5.0 software and later.*

How to setup your Aastra IP phones for G.722 codec use:

### Method 1: Set using the Web UI

Add G.722 to your Codec Preference List. Assigning it to Codec 1 will ensure the highest priority during the codec negotiation.

This option is available under:

**Advanced Settings-> Global SIP settings->Codec Preference List**

In this example, G.722 has the highest priority, therefore will be offered as the first choice codec when setting up a call with another device. If both devices agree to use G.722 the call will be established using G.722 and Aastra Hi-Q will automatically be used. Other codecs such as G.729 and G.711 can also be configured in case the other phones can not negotiate G.722 (this is recommended configuration).

### Method 2: Set using the Config Files

Add the following parameter to the config file: *Sip customized codec: payload=9;ptime=30;silsupp=on,payload=18;ptime=30;silsupp=on,payload=0;ptime=30;silsupp=on,payload=8;ptime=30;silsupp=on*

where:

payload=9;ptime=30;silsupp=on	represents G.722 codec
payload=18;ptime=30;silsupp=on	represents G.729 codec
payload=0;ptime=30;silsupp=on	represents G.711u codec
payload=8;ptime=30;silsupp=on	represents G.711a codec

#### Codec Preference List

Note: Basic Codecs Include G.711u (8K), G.711a (8K), G.729

Codec 1	G.722	←	Codec 1:	G.722
Codec 2	G.729	←	Codec 2:	G.729
Codec 3	G.711u (8K)	←	Codec 3:	G.711u
Codec 4	G.711a (8K)	←	Codec 4:	G.711a
Codec 5	None			
Codec 6	None			
Codec 7	None			
Codec 8	None			
Codec 9	None			
Codec 10	None			

## 7. Can any PBX or Call Server support Aastra Hi-Q?

Most PBXs and call servers can support G.722. Typically it's the end points (SIP phones) that negotiate end to end which codec to use based on their configuration preferences. However, not all PBXs or call servers support G.722, or they may need additional configuration to allow its use. Please contact your call server administrator for details.

## 8. What are the benefits of using Aastra Hi-Q?

Aastra Hi-Q enhances the clarity of voice calls making it easier to understand all that is said. It makes conversations more life like giving a richer user experience and increasing productivity. The benefits can be clearly heard on both handset and speaker phone. It's available for all 67xxi SIP phones via a simple software upgrade, so both new and existing users can benefit from this innovative feature of the Aastra phones.

## 9. When is Aastra Hi-Q going to be available?

Aastra Hi-Q technology is available in release 2.5.0 (released March 2009) and all subsequent releases. In the September maintenance release, build 2.5.2.10xx, a visual indicator has been added to give users visibility to when Hi-Q is active.

## 10. Is there a charge for using Aastra Hi-Q?

Aastra is making this innovative feature available to all users of applicable models free of charge. Currently Aastra publicly offers its new firmware versions on its own web sites, freely available for download.

- » All existing & new Aastra 67xxi customers can benefit from this enhancement free of charge
- » No specialized hardware required, no additional fees

## 11. What network implications are there when using Aastra Hi-Q?

Aastra Hi-Q builds on G.722 wideband codec and utilizes the exact same bandwidth as G.722 would use. G.722 requires a data rate of 48, 56, or 64 kbps due to the larger sample rate of the voice channel. In comparison, narrowband codecs like G.711 typically operate at data rates of 64 kbps; G.729 operates at 8 kbps. To use G.722 you need both terminating devices to support it as well as any call control (call server or PBX) to support its use.

## 12. Is Aastra Hi-Q available for a 3-way conference hosted by an Aastra phone?

Yes! Aastra SIP phones fully support 3-way conference calling with Aastra Hi-Q and G.722 codec.