

## How to Install the iLBC Codec Patch on an Acid Release

**Note – These instructions are NOT for the BBB image. This code already exists on the image and is fully useable. This patch overwrites files and is written to work with version – astrc-1.4.23-pre It might work with other versions but there is no guarantee.**

The iLBC or Internet Low Bandwidth Codec was developed by Global IP solutions and was included in Asterisk for many years until it was removed due to possible licensing issues. Google bought GIPS in 2011 and made the codec open source. It uses a 20ms frame rate and a fixed 15.2kbit/s bitrate in Allstar.

Since this codec already exists in the BBB image you may want to include it in your Centos PC version of Allstar. This would allow an iLBC connection to exist between a PC running Allstar and a BBB server.

To update your PC first download the patch tarball. This should be placed one directory above the Asterisk source directory. On Centos this would be `/usr/src/astsrc` as the source is in `/usr/src/astsrc/asterisk`

```
cd /usr/src/astsrc
```

```
wget http://www.hamvoip.org/downloads/patch-kit-with-ilbc.tgz
```

Then untar it.

```
tar xvzf patch-kit-with-ilbc.tgz
```

Now you have to recompile Asterisk.

```
cd asterisk
```

```
make clean
```

```
make menuselect
```

This will bring up a menu selection for Asterisk. Select item #4 Codec Translators. Scroll to `codec_ilbc` and check that box. Save (s) the selection and exit.

Then do:

```
make
```

This re-compiles Asterisk and will take a little while. When it is done do:

```
make install
```

Then you will need to add the allow statements to your `iax.conf` file in the general and radio sections.

Note that order matters. You will probably want to put ilbc first then g726 and ulaw. Your files general stanza will look something like this when you are done:

```
[general]
bindport=4569
bindaddr=0.0.0.0
disallow=all
allow=ilbc <<<<< added
allow=g726aal2
allow=ulaw
allow=gsm
etc.....
```

Do the same for the other radio stanzas.

Save the files and restart Asterisk

```
astres.sh
```

That's it, you now should be able to make and receive iLBC connections. To check what your channels are doing do the following at the Linux prompt:

```
asterisk -rvvv
```

```
iax2 show channels
```

The codec format for the connected channels should be displayed. Note that you need to actually send voice over the connection both way s before you will get an accurate format indication.

The iLBC patch credit goes to Dave, KB4FXC

Doug, WA3DSP