

NxtVox NXA800P Analog PCI Card

Product Information

The NXA800P is a modular analog telephony interface product, which offers 8 ports. It supports FXO (NXO100) and FXS (NXS100) module interfaces for connecting POTS lines and analog telephones, respectively through your PC. Our NXO100 and NXS100 modules are also compatible with Digium's modules: X100M and S100M, allowing you to use NxtVox modules on Digium cards and Digium modules on NxtVox cards.

Step 1 of 8: Hardware Installation

1. Turn off your computer. Remember to unplug the AC power cable!
2. Insert the NXA800P into a 3.3v or 5.0v PCI slot.
3. If your card has FXS modules (**green**), you must plug a hard disk power cable into the card to provide signaling power to your phones.
4. You may plug the AC power cable back in and turn your computer back on.

Note: We strongly recommend that your PC is powered off during card installation; otherwise it could damage your computer and your NxtVox components.

Step 2 of 8: Pre-requisites

Before downloading and compiling Asterisk and Zaptel drivers, please review the check list below to make sure you have all the pre-requisites to continue with installation:

- Linux kernel source code
- zlib-devel
- OpenSSL and respective development libraries
- Bison 1.875 or higher
- Kernel module crc_ccitt
- Patch/Diff Utils
- Subversion

If you are using Redhat Linux or one of its derivatives (such as Fedora Core or CentOS), you should be able to install the following packages (during installation or using yum install):

- kernel-devel
- zlib
- zlib-devel
- openssl
- openssl-devel
- bison
- patch
- subversion

Step 3 of 8: Zaptel Driver Installation

The NxtVox NXA800P utilizes a slightly modified chipset, and as such we provide you with the patches for the Zaptel libraries. You can either use the Zaptel tarball that we have already patched, or you can patch it yourself.

a) Use existing Zaptel tarball (Easy method)

- `cd /usr/src`
- Browse the download directory to find the appropriate version of Zaptel you would like to use at <http://www.NxtVox.com/downloads/tarballs/>
- Download it using wget eg: `wget http://www.NxtVox.com/downloads/tarball/nxa8xx-zaptel-1.4.8.tar.gz`
- `tar zxvf nxa8xx-zaptel-version.tar.gz`
- `cd nxa8xx-zaptel-version`
- `./configure` (skip this for Zaptel 1.2 version)
- `make clean && make install`

b) Or patch it using Zaptel you already have (Longer method)

- `cd /usr/src`
- Download your desired Zaptel tarball from <ftp://ftp.digium.com> and extract it
- Find the corresponding patch from <http://www.NxtVox.com/downloads/patch/> and fetch it into the same directory as where you extracted your Zaptel tarball
- `patch -p0 < nxa8xx-zaptel-version.patch`
- `make clean && make install`

Step 4 of 8: Libpri Installation

- `cd /usr/src`
- `svn co http://svn.digium.com/svn/libpri/branches/1.4 libpri-1.4`
- `cd libpri-1.4`
- `make clean && make install`

Step 5 of 8: Asterisk Installation

- `cd /usr/src`
- `svn co http://svn.digium.com/svn/asterisk/branches/1.4 asterisk-1.4`
- `cd asterisk-1.4`
- `make clean && make install`

If you wish to install sample Asterisk configuration files to reference by, type:

- `make samples`

Step 6 of 8: Zaptel Configuration

If you have Zaptel already installed please shutdown Zaptel and Asterisk first:

- `/etc/init.d/asterisk stop`
- `/etc/init.d/zaptel stop`

- `modprobe -r zaptel`

If you are informed Zaptel is being used by another module, shut it down by running:

- `modprobe -r <module name>`

Load the Zaptel libraries and NXA8xx chipset if you aren't using system service startup:

- `modprobe zaptel && sleep 5 && modprobe nxa8xx`

To start Zaptel and NXA8xx chipset if you are using system service startup:

- `/etc/init.d/zaptel start`

Step 7 of 8: Asterisk Configuration

If you are running a "plain vanilla" installation of Asterisk you must now adjust `/etc/zaptel.conf`, run `ztcfg` and then configure your Zaptel channels in Asterisk at `/etc/asterisk/zapata.conf`

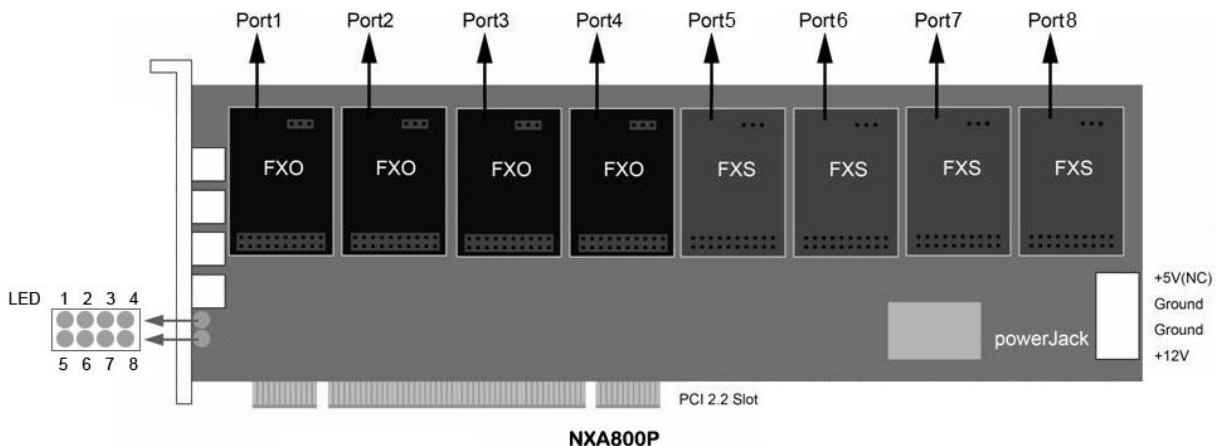
If you are using Trixbox this is typically accomplished automatically by:

- `genzaptelconf`

Step 8 of 8: Telephone Cable Installation

The NXA800P has four RJ-14 sockets on the card. Each line has one of eight corresponding module positions on the NxtVox board, which are respectively placed. For example telephone line 2 on port 1 would correspond with Module Port 2 on the board.

Each RJ-14 socket has 4 pins. The NXA800P, according to telephony standards, uses the middle pins (2 and 3) for the first channel and the outer (1 and 4) for the second channel for any corresponding port.



Warranty and Technical Support

NxtVox provides two years warranty for the quality of all NxtVox brand cards and modules. Our e-mail address for all support relation inquiries is support@nxtvox.com.