

How to Save Money with Internet Telephones

- The Do-It-Yourself (DIY) Small and Home Office Guide to VOIP

Voice Over Internet Protocol (VOIP - pronounced Voy-P) is changing the way we communicate. This short DIY guide will explore the primary advantages of using VOIP (1) cost savings and (2) rich feature set.

This article outlines the setup of a simple, cost effective, working VOIP phone system. The two main problems that we will overcome are: (1) selecting a reliable, cost effective VOIP provider and (2) maintaining VOIP phone call quality.

You will need:

- (1) Broadband Connection - either DSL or Cable;
 - You should test your connection to make sure you have enough bandwidth with this online tool <http://www.testyourvoip.com/> Almost all broadband connections will work.
- (2) Broadband Router with Quality of Service (QOS) capability - \$75
 - QOS is the ability of a router to give priority to certain types of Internet traffic; in this case priority is given to VOIP phone calls; this will eliminate 'choppy' sounding calls and is a **REQUIREMENT**
- (3) VOIP Analog Telephone Adapter (ATA) - \$75
 - this device is allows you to connect a standard telephone to your VOIP phone

Choose the Right Provider

I have used three different providers. Horror stories abound on the Internet and I can tell you from personal experience that if you choose the wrong provider you will be sorry.

I have been using VoicePulse (www.voicepulse.com) as my VOIP provider for over a year now. I initially selected this provider because they are very well reviewed by 166 individual users at Broadband Reports.

<http://www.broadbandreports.com/gbu>

This section of Broadband Reports is called:

VOICE OVER IP Providers

1:Web-site 2:Ease of Installation 3:Call Quality 4:Reliability
5:Tech Support 6:Value for money

The Good, The Bad and The Ugly

As you can see VoicePulse is one of The Good. It is very well reviewed and it has worked well for me.

Name	Avg /5	Biz %	Avg \$mth	Day Wait	1	2	3	4	5	6
NUVIO	4.58	8%	\$52	9	B	A+	A	A+	A	A
ViaTalk	4.37	1%	\$15	7	B+	A	A-	A-	B+	A-
VoicePulse	4.33	1%	\$17	5	B+	A	A-	A-	B+	A-
Optimum Voice	4.30	0%	\$33	7	B+	A-	A	B+	B	A
ATT CallVantage	4.22	2%	\$31	7	A-	A-	A	A-	B	B+
QuantumVoice	4.06	6%	\$32	16	C-	A	A	A-	A	B
Vonage	3.96	3%	\$26	8	B+	A-	B+	B+	C+	B+
Verizon VoiceWing	3.82	0%	\$29	3	B+	A-	B	B-	B	B-
Packet8	3.77	1%	\$23	7	B-	A	B	B	C+	B+
SUNROCKET	3.73	1%	\$20	9	B	A-	B	B-	C	B+
BroadVoice	3.67	1%	\$19	3	B+	A-	B	C+	C	B
LIINGO	3.48	1%	\$21	9	B-	B+	B-	C+	C	B
GalaxyVoice	3.26	0%	\$14	3	C-	B-	B	C	B-	B-

The two basic packages offered by VoicePulse are:

America Unlimited - \$24.99/month for unlimited local and US long distance

Local Unlimited - \$14.99/month for unlimited local calling;
w/ 200 minutes of US long distance minutes included
3.9¢/min long distance after first 200 minutes
(I use this plan since I call long distance on my cell phone)

VoicePulse Features: (see www.VoicePulse.com for more info)

Telemarketer Block; Anonymous Call Block; Do Not Disturb; Scheduled Do Not Disturb;
Filter Calls by phone number; Distinctive Ring; CallerID with Name; Customize CallerID
with your personal Contact Lists; Call Waiting with CallerID; Call Transfer; Return Call *69;
3-way Calling; Enhanced Voicemail (messages emailed to you); Speed Dial

Call Hunt / Find Me - ring one or multiple phones (even your cell phone!)
in sequence until someone picks up.

Multi-Ring - ring multiple phones (even your cell phone!)
simultaneously until someone picks up.

Conference Calls (\$4.99/month +8¢/min)
Virtual phone numbers in any area code ring to your main line (\$4.99/month)

Connect to the Internet with a Quality of Service (QOS) Router

A major problem with VOIP phone calls is that if your bandwidth is being used for anything else then your VOIP call can be 'choppy' and of very poor quality. Pretty much anything else you do with your Internet connection is enough to mess up your VOIP calls even just surfing web pages.

This neat little device solves that problem once and for all.

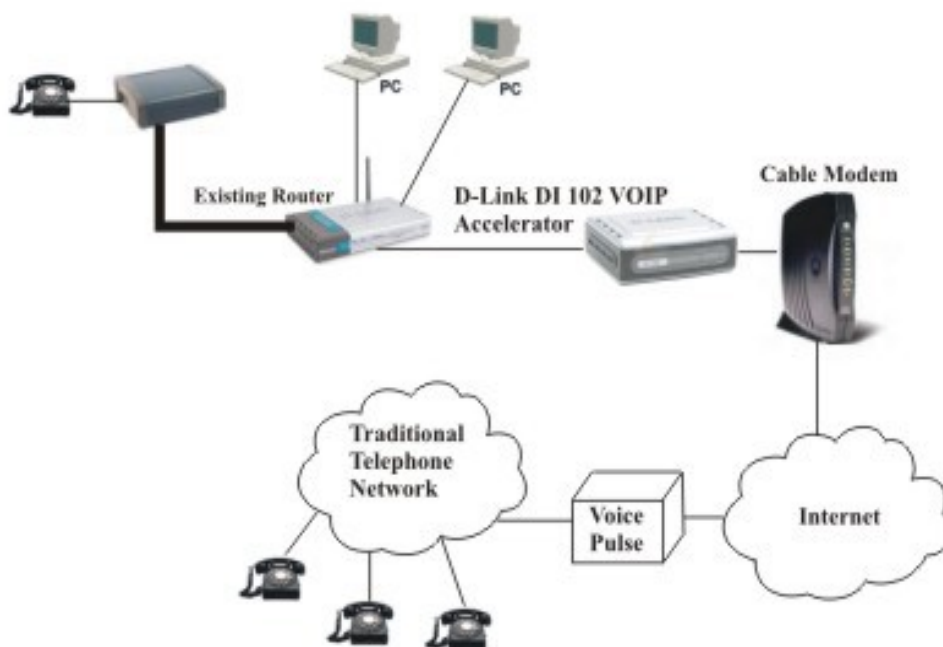


\$62.99 - D-Link DI-102 Broadband Internet/VOIP Accelerator

<http://www.newegg.com/Product/Product.asp?Item=N82E16876115001>

It gives first priority to VOIP data. Having lower priority is not a problem for other types of data. There will be no perceptible slow down of other Internet activity.

Plug the D-Link VOIP Accelerator in between your Cable or DSL modem and your current router.



Connect Your Traditional Telephone to Your Network

To connect your telephone to your network you will need an Analog Telephone Adapter. Sipura is one of the best manufacturers of ATA's. Plug the Sipura ATA into your network and then plug your regular phone into the ATA. Any phone will work. I use a Uniden 5.8GHz wireless phone that I bought at Cost Co.

Analog Telephone Adapter



\$86.95 Linksys/Sipura SPA-3000 (w/ PSTN)

<http://store.voxilla.com/customer/product.php?productid=16144>

Includes 1 month free service with VoicePulse.

Activating Your Account

If you signed up with VoicePulse you will give them a serial number off your Sipura ATA and then they will automatically download a configuration file to your Sipura. That's it! You can start calling and receiving phone calls.

If you have any problems VoicePulse technical support is available. I've never had to wait more than a couple of minutes.

Now login to your account at <http://www.voicepulse.com> to configure your features, Multi-Ring, Do Not Disturb, Voicemail notification email address, etc.

Important

Make sure you configure Line Unavailable Forwarding to another number in case your Internet connection goes down.

Other Tips

- You can configure multiple phone lines in this same manner. Once you have your primary account with VoicePulse you can use any ATA to add other lines. Some models of Sipura even have jacks for two phone lines built in. You can even add a 'Soft-Phone' on your second line which is a phone on your computer. You'll need a USB microphone/headset. Check out this popular free SoftPhone called X-Lite. <http://www.xten.com/index.php?menu=Products&smenu=xlite>
- You will need approximately 100Mbps upload and download speed for each simultaneously VOIP phone call. Basic DSL is typically 384Kbps upload and 1500Kbps download speed. Basic cable is typically 512Kbps upload and 1500Kbps download speed.

Other Tips (continued)

- VoicePulse has calling plans for both business and residential. If you are a 'high-volume' user you will have to upgrade to a business account. Otherwise you can easily get away with a simple residential account.
- Configure Multi-ring to ring your VOIP phone and your cell phone at the same time. This way you can only use your cell phone while you are not in your office. If you lower your monthly minutes on your cell phone you can easily pay for your VOIP service with the savings.
- If you lower your cell phone plan make sure you don't go over your minutes per minutes with this handy tool for either Verizon or Sprint. <http://verizon-minutes-used.blogspot.com/>
It is a plug-in for the Firefox browser that reports your minutes used in the status bar.
- If you want to transfer your home/office number to your VOIP provider you must allow at least 60 days. During this time the account of the number you are transferring must remain active. If you transfer your cell phone number then your carrier may considers that you have terminated your contract and you require you to pay the early termination fee. I had to threaten to leave Verizon Wireless before they rescinded and let me get a new number without paying the early termination fee. I did however have to start a new one year contract with Verizon.
- Don't cancel your land phone line too fast. Make sure your VOIP solution is glitch free before you take the leap to VOIP only.
- Don't go VOIP only. You should have at least one other phone this could be your cell phone or a land line.
- Faxing with VOIP is hit-or-miss. Try it, it works well for many people. However, some installations can only communicate with 50 to 85% of the fax machines out there. New VOIP faxing protocols are in the works and will be common place soon.