

DrayTek

Vigor2800V / Vigor2800VG

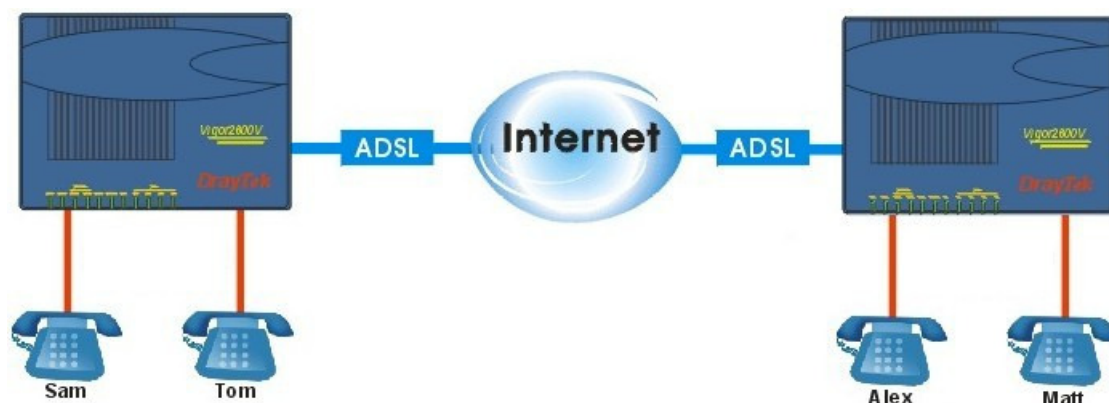


Supports :
ADSL
ADSL2
ADSL2+

ADSL2+ Router with Voice-over-IP Firewall, VPN & Printer Port

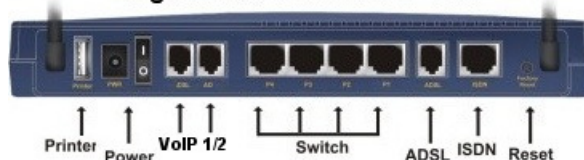
The DrayTek **Vigor2800V** has all of the features of the [Vigor2800](#) ADSL router with the addition of two phone sockets, to provide Voice-Over-IP (VoIP) facilities. VoIP enables you to use your existing broadband capacity to carry regular voice calls to suitably equipped remote sites, for example another Vigor2800V router, to any other compatible VoIP device or, via a PSTN gateway to or from any other regular phone line or mobile phone worldwide.

Using the Voice-over-IP facility is simple. You connect any standard telephone (corded or cordless) to one of the phone ports on the Vigor2800V. Although you can dial IP addresses, you would normally dial someone's 'SIP Address' which they obtain from their SIP Registrar (such as DrayTEL). You hear ringing and bust signals just like on a normal phone line. The voice calls (speech) are digitised and compressed in real time to make maximum use of the bandwidth and DrayTek's high performance 'codecs' provide 'toll quality' voice calls (quality similar to a regular fixed telephone line). A preset QoS system automatically gives voice traffic priority over other traffic without your available bandwidth.



The calls between the two sites above are free of charge, making use of your existing always-on ADSL connection, but cost isn't the only advantage; using VOIP means that you have additional call capacity in your home or office, without tying up your regular phone line. You can also make calls to regular phone lines, via a PSTN gateway such as DrayTEL (see later).

Vigor2800 Series Rear Panel



Note : Sockets vary with model.

Vigor2800V Series Voice-over-IP Features :

- Internet/VPN Facilities as per [Vigor2800](#) router
- Wireless Facilities as per [Vigor2800G](#) router (Vigor2800VG/Vigor2600VGi only)
- VoIP Facilities include :
 - Voice calls carried over existing ADSL connection
 - Two VOIP ports (RJ11 to BT type sockets)
 - Automatic QoS Assurance for Voice-over-IP Calls - VoIP given highest priority
 - SIP Standard Compliant
 - VoIP Codecs : 8Kb/s-64Kb/s
 - Registration with multiple different SIP Registrars at the same time - **New!**
 - Distinctive Ring for incoming calls on different accounts - **New!**
 - Automatically select different SIP providers depending on destination called - **New!**
 - Manually select SIP provider for outgoing calls by user-defined prefix - **New!**
 - Hotline Facility - connects to a fixed destination when you lift the handset - **New!**
 - Do Not Disturb - Phones can be set to not ring according to a time schedule (e.g. at night) - **New!**
 - Speed Dial (Phone Book) for quick dialling
 - Caller ID on phone ports (UK Standard Compliant) - **New!**
 - Integration with the PSTN via ITSP (e.g. DrayTel) enabling you to make/recieve calls from regular phone lines
 - Connect any standard analogue phone into the phone ports
 - UK Standard Call progress Tones (Ring, Busy cadence etc.)
 - Adjustable Gain (volume) for voice tx/rx
 - Log of incoming/outgoing calls & realtime Status reporting
 - DTMF Transmission : In-Band, Out-of-Band (RFC2833), SIP Info
 - Low latency queuing (LLQ), Random Early Detection
 - G.168 Line Electrical Echo cancellation & Jitter Buffer (125 ms)
 - Support for VoIP through VPN tunnels
 - Built-in Call Handling (PBX) Facilities:
 - Intercom (call) between local voice/phone ports - **New!**
 - SIP Compliant Call Diversion (Forwarding) - Always, Busy or No-Answer
 - DND (Do Not Disturb) with automatic time schedule - **New!**
 - Call Waiting - **New!**
 - Call Transfer - **New!**
 - Call Conference - **New!**
 - [T.38](#) Fax Facilities - **New!**
 - Outbound NAT Proxy / STUN Server Support

Multiple Simultaneous SIP Registrations

For the best VoIP integration, you set up accounts with SIP-compatible VoIP gateways, such as DrayTEL. You may have several VoIP accounts with your SIP provider (such as DrayTEL) or you may have accounts with various different SIP providers. The Vigor2800V allows you to set up up to 6 different accounts, and choose which of the two phone ports each of them rings (or either or both). You can also set your preferred SIP account for outgoing calls on each phone port:

SIP Accounts List

Index	Profile	Domain/Realm	Account Name	Ring Port		Ring Type	Status
1	Home/Family	draytel.org	899999	<input checked="" type="checkbox"/> VoIP1	<input checked="" type="checkbox"/> VoIP2	3	R
2	Office	draytel.org	891000	<input checked="" type="checkbox"/> VoIP1	<input checked="" type="checkbox"/> VoIP2	1	R
3	Private	draytel.org	890123	<input checked="" type="checkbox"/> VoIP1	<input checked="" type="checkbox"/> VoIP2	2	-



Hotline Facility

The Vigor2800V lets you select a preset destination for one or both of your phone ports so that as soon as you lift the handset, you are connected to the destination, which can be a VoIP destination or PSTN (via a PSTN Gateway such as DrayTEL). This is useful, for example, for teleworkers who only need to contact head office, or perhaps for a taxi service where customers can be put straight through to your office. It saves time dialling and prevents calling other unauthorised destinations.

Phone Directory - Quick Dialling

Rather than having to dial a whole IP or SIP address or phone number each time, the Vigor2800V has a quick-dial directory for up to 99 entries so that you can use a short code (of your choice). The router will automatically keep the SIP registrar updated with your current location (by IP address) so you do not need a fixed IP address.

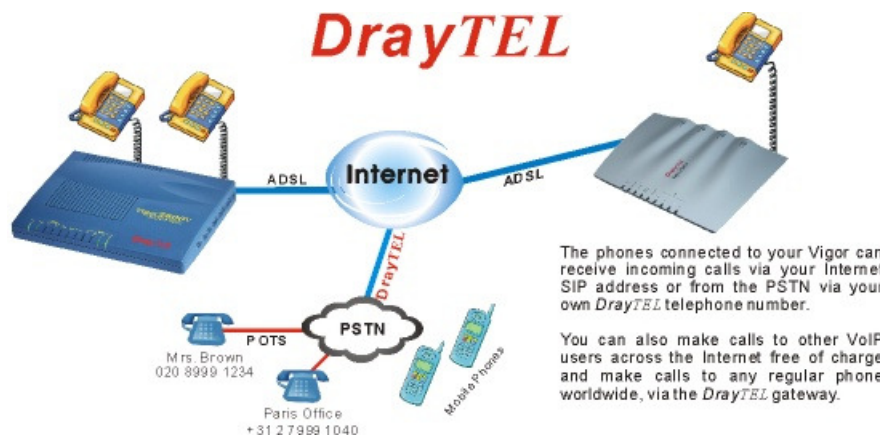
DialPlan					
DialPlan Configuration					
Index	Phone number	Display Name	SIP URL	Status	
1.	123	Dave	899999@draytel.org	v	
2.	400	Billy	35362@woip.com	v	
3.	200	Auntie Maude	01832832321@draytel.org	v	
4.	362	Matt (Mobile)	07961832321@draytel.org	v	
5.	933	Matt (VoIP Office)	888888@draytel.org	v	

Automatic QoS Assurance for VoIP

Traffic levels from your local users to the Internet can vary; if someone else on your router is downloading, that will affect your speeds. Mostly that's quite tolerable - you just get your data a little slower but you wouldn't normally notice. With VoIP, things are different. A voice call has to be digitised, transmitted to the remote end and then turned back into an analogue waveform (sound!) in real-time. If part of a packet is delayed then the sound becomes jerky and intermittent which at best is annoying and in worst cases intolerable. The Vigor2800V firstly uses efficient codecs designed to make the best use of available bandwidth, but secondly includes automatic QoS Assurance. QoS (Quality of Service) Assurance reserves part of your Internet bandwidth for voice calls whilst a voice call is active (the reserved bandwidth is available for regular use if there is no Voice call active). This means that, regardless of what else other people are doing on your Network, you will always have the necessary inbound and outbound bandwidth reserved exclusively for Voice.

PSTN Integration via DrayTEL service

Calls between VoIP users can be made simply by dialling each other's IP addresses, but as IP addresses are long and can change, a SIP registrar (such as DrayTEL) can allocate you a more convenient ID for people to call you on. A SIP ID/address, for example, might be 899899@draytel.org. Then other SIP users can call you on your DrayTEL address (even if they don't use DrayTEL themselves).



The phones connected to your Vigor can receive incoming calls via your Internet SIP address or from the PSTN via your own DrayTEL telephone number.

You can also make calls to other VoIP users across the Internet free of charge and make calls to any regular phone worldwide, via the DrayTEL gateway.

The DrayTEL server also provides a gateway to the PSTN. This means that you can not only make free calls to other VoIP/SIP users, but you can call any regular telephone line or mobile (calls to the PSTN are chargeable at low DrayTEL rates). DrayTEL can also allocate your own personal '0870' (national rate) phone number for anyone to call you on.

With your router you'll receive a voucher entitling to a free DrayTEL account, free allocation of your 0870 number and £2.00 worth of call credit to make calls to regular phone lines worldwide (you can buy more credit). Remember call credit is only needed for calls to the PSTN - VoIP-to-VoIP calls are always free (so get your friends to buy a Vigor2500V too!). There is no charge to you to receive calls from the PSTN via your DrayTEL 0870 number and there is no rental charge.

Note : The DrayTEL service is operated independently of DrayTek Corp. and usage is subject to DrayTEL's own service terms. Voucher valid in UK/NI only.

"Of the different manufacturers tested, we were able to get both the Vigor2600VG and Vigor2500V routers up and running and making VoIP calls in a matter of minutes, both to other SIP users and out to the public phone network. Call quality in both instances was excellent using the default codecs. Both Vigor routers have features to recommend them and with good support from manufacturer and distributor, they're well worth looking at."

Personal Computer World, March 2005



"As with all DrayTek's Vigors, the Vigor2500V offers a wealth of features and the VoIP telephony works particularly well. At the price, it won't be long before you start saving money on phone calls either. Other SIP users will have noticed that call quality can be destroyed by using the same broadband connection for heavy data use - particularly upstream. The Vigor2500V's QoS Assurance gets around this by dedicating bandwidth to the telephony when it's in operation so you always get decent quality."

PC Pro, March 2005



by the mention of any particular service provider.
Page last modified 15 Mar 2006