

## NAT / DHCP vs Static IP: Which To Choose And Why



Amplex Internet connections are configured in two common ways: NAT (DHCP) and Static IP. Each type of configuration has distinct advantages and both options are available at no additional charge to Amplex customers. If you are not sure which type of connection you have you can always contact Amplex support and we will be happy to review your account information with you.

NAT (DHCP) allows you to plug the Amplex service line directly in to a wireless router or computer and have the IP address information automatically assigned. This offers the benefit of easily connecting a new routers or computer. This connection type keeps a NAT table (a list of connections allowed to communication with any device plugged in to the Amplex service line) which will automatically block any random connection unless a device inside of your network has requested the information. This is the most common way Amplex configuration and allows the greatest ease of use.

Static IP requires you to program in a unique Amplex provided internet address in to a wireless router or computer directly connected to the Amplex service line. This offers the benefit of allowing the connected device to receive information directly and communicate to the public internet without the need of a NAT table. This can be useful for some game systems like the xBox 360 / One and PS3 / PS4 and for customers hosting servers on their connections. A minority of Amplex customers use this type of setup as it requires you to program in information to your router or computer and may allow easier remote access to whatever is connected to the Amplex service line creating a potential security risk.

### **What if I need a static IP, how do I set one up?**

If you need a static IP address it's as simple as calling Amplex support, getting your static IP information and programming it into your router. Make sure to write this information down as you will need it if you ever reset your router or replace it with a new router.

In most situations the information you will need for a static IP will be:

- IP Address (Example 64.246.96.132)
- Subnet Mask (Example: 255.255.255.192)
- Gateway (Example: 64.246.96.129)
- Primary DNS (Example: 64.246.100.1)
- Secondary DNS (Example: 64.246.115.1)

In most routers you can program in a static IP address under the WAN or Internet settings screen of the router. It is always a good idea to locate your routers manual and look up where the WAN or internet address settings page is before trying to program this information in. Below is an example screenshot of a static IP address setup on a wireless router.

Status
Quick Setup
WPS
<b>Network</b>
- WAN
- MAC Clone
- LAN
Wireless
DHCP
Forwarding
Security
Parental Control
Access Control
Advanced Routing
Bandwidth Control
IP & MAC Binding
Dynamic DNS
System Tools

### WAN

WAN Connection Type:

IP Address:

Subnet Mask:

Default Gateway:

MTU Size (in bytes):  (The default is 1500, do not change unless necessary.)

Primary DNS:

Secondary DNS:  (Optional)