

ASL 5000 Network Connection with Static IP

Introduction	<p>Several methods exist for making a network connection of the ASL 5000 to the host PC. This application note covers some technical details for optimizing the setup. The manual describes the method of connecting the ASL to a network which is using a DHCP server (a router that issues automatic IP addresses to all devices coming onto the network). In situations where static IP addresses need to be assigned, the procedure described in the manual is as follows:</p>
TCP/IP (Ethernet) with fixed IP address	<p>If a fixed IP address is intended, this can be accomplished as part of the firmware update (see "Preparation for 32-bit Firmware" on page 119). Before the update, make the desired change in the WATTCP.CFG-file that is part of the upload package (C:\program files\ASL Software 3.4\Firmwares\Current\lung.zip). A line such as:</p> <pre>my_ip = 192.168.168.47</pre> <p>should replace the default my_ip = DHCP (using "Notepad" on the host).</p> <p>NOTE: The host PC and the ASL 5000 Breathing Simulator must have compatible IP addresses in order to establish a proper connection via UDP broadcast, the method used by the ASL 5000. This means that the first three sets of digits in the IP address have to match (both devices on the same subnet). For a network where your PC is typically assigned its address by a DHCP server, verify that the range is compatible with the fixed IP of the ASL.</p> <p>With more recent firmware versions (4.7.nn), it is now possible to use fixed IP addresses beyond subnet boundaries without the services of a UDP broadcast. Accessing a device with a fixed IP address can be made the default via the Project File Tool. We recommend using this feature whenever an ASL 5000 is to be addressed that has a fixed IP. When attempting to access a device from outside the intranet, make sure to prepare the firewall accordingly to allow traffic to and from the ASL 5000.</p> 