### 4.6. INTERNET Port: NAS+Router

For switch configurations, the INTERNET port is a convenient Recovery port with a static IP address (3.7. *INTERNET Port: NAS+Switch*). However, the INTERNET port becomes the door to the network WAN or Internet when using the Wireless Space as a router. Further information on connecting the Wireless Space to the network is available in the following sections:

- ♦ 4.1. Before the Installation
- ◆ 4.3. Configuration 4: Router Wired Only
- ♦ 4.4. Configuration 5: Router Wireless Access Point
- ◆ 4.5.3. Dashboard: Network WAN

Once the Wireless Space is prepared to join the home or business router, server, or Internet provider, you can make the Ethernet connection using the INTERNET port.

#### 4.6.5.1. NAS+Router Recovery

The INTERNET port is not meant for Recovery when using a router configuration. You should have the ability to reach the Dashboard when connected to one of the LAN ports. Simply type the name of the Wireless Space or its IP address in the URL bar of your web browser. Use LaCie Network Assistant to find the IP address if necessary.

In the event that the Dashboard does not load in your browser, try unplugging the Ethernet cable from the INTERNET port. If that allows for access to the Dashboard, look for a potential DHCP or IP address conflict between the Wireless Space and the router, server, or Internet provider.



### 4.7. Beyond Basic Endnote

This is the end of the Beyond Basic installation and administration section. Please refer to the User Manual for tips on Troubleshooting (6. *Troubleshooting*), operation, or changes in the configuration. Please do not forget to check for firmware updates for your Wireless Space at <u>www.lacie.com</u>.

LaCie hopes that you enjoy your Wireless Space!



## 5. Glossary

Many networking and wireless terms may appear new or a bit challenging to follow. This small glossary of networking acronyms and protocols offers a simple reference to aid in setting up and maintaining your Wireless Space. Due to the complexity of networking terminology, this glossary intends only to provide introductory definitions.

802.11b/g/n – The number 802.11 is the IEEE (Institute of Electrical and Electronics Engineers) term for the wireless signal on a land area network (WLAN). The letters that follow indicate the levels of strength. The following lists the maximum throughputs for b and g:

- ♦ b=11 Mb/s
- ♦ g=54 Mb/s

n is the most recent protocol:

♦ n=well over 50 Mb/s

Access Point - A device attached to an existing network (home, company, cell phone, etc.) that can extend the service. The Wireless Space, once attached to a network, can become an access point for 1Gb Ethernet or wireless connectivity. More commonly, the reference is for a wireless access point.

AFP (Apple Filing Protocol) - Similar to SMB/CIFS and NFS, AFP is a protocol used for requests over a network. Requests could mean accessing shared files, volumes, and devices (such as printers). AFP is used for Apple-based systems, Mac OS 9 and X.

DHCP (Dynamic Host Configuration Protocol) - A computer requires an identity when it connects to a network, otherwise access to the Internet as well as company or home servers will not be possible. That identity is called an IP (Internet Protocol) address, which may be enabled manually (Static IP) in the operating system network settings or assigned by a network management device, such as a DHCP device. Though a generic term, the device could be a server or an active switch, as found in business environments; or, a cable or DSL modem offered by an Internet provider. The Wireless Space has the ability to assign IP addresses dynamically, which means it can be configured as a DHCP server. An example of an IP address is 192.168.10.1

DHCP Leases – Each time a computer on the network boots, it must have an IP address to communicate with other systems and to access the Internet. With a DHCP server, the computer is assigned an IP address as it boots onto the network. The lease is the amount of time that the client can use a specific IP address. The leases can be static (always the same address) or dynamic, (changing periodically as configured in the DHCP server settings).

DHCP Server Range Start IP/Range End IP - The range of addresses that a DHCP server may assign to the attached systems.

DLNA<sup>™</sup> (Digital Living Network Alliance) - A standard (based on UPnP) widely embraced by consumer electronic manufacturers to allow entertainment devices within the home to share movies, music, and photos across a home network.

DMZ (Demilitarized Zone) - Email and web servers in a company find it difficult to filter all Internet traffic since it would make internal and external communication guite difficult. For example, sales of a company's services require a web site for potential customers to visit and incoming/outgoing email for client inquiries. In most cases, a business must have an open line of communication to the outside world. However, this also places a network in danger of attack, including all the computers connected to heavily trafficked servers. Taken from the military term, a DMZ allows a network to place those computers or servers with the most exposure to outside traffic (chiefly, the Internet) on their own subnetwork (see netmask). To stave off potential security risks, firewall protection is placed between the DMZ subnetwork and the servers and computers on the internal network. For home use, the DMZ is an advanced feature that can be used to filter outside Internet traffic through one IP address; for example, a computer or a home server.

DNS (Domain Name System or Domain Name Server) - All email and web addresses are domain names. Every web site and email account has a specific place within a server that has a unique IP address (such as 192.168.54.25, IPv4; or 2001:db8:1f70::999:d e8:7648:6e8, IPv6). However, when we launch a favorite browser to buy a new hard drive or send an email, we do not type lengthy, hard to remember numerical addresses. Instead, we use company names, www.lacie.com, or email addresses, sales@lacie.com. The domain names in these examples are "lacie.com" or "@lacie.com". The server manages the tie between the IP address it requires for a network identity and the domain name for communication.

DSL (Digital Subscriber Line) - Broadband data transmitted digitally over telephone wires. The local telephone company provides a service that includes Internet, telephone, and, for some, cable television. For access to the Internet, telephone companies generally provide an adapter or DSL modem for connection to a computer via Ethernet.

Dynamic DNS - This moves DNS hosting a bit further as it provides access to domain names hosted on servers with varying (hence, dynamic) IP addresses. This means that web sites are not forced to maintain a single IP address, but can be managed within a network that uses DHCP to assign an identity. The Dynamic DNS host is smart enough to read the domain name and find the IP address to which it belongs. Dynamic DNS is a great tool for accessing home network servers, such as the Wireless Space, from anywhere outside the home. Dynamic Port Forwarding - Allows applications to use SOCKS servers on local ports for network communication and Internet access. This can be very convenient as it will avoid having to configure port forwarding each time an application is used. The SOCKS is configured on a server to route traffic while the application, such as a web browser, is assigned a SOCKS in its preferences.

External Port - This port deals with requests outside the LAN, working with the NAT (network address translation) to convert external IP addresses and port numbers to addresses that will be accepted inside the network.

Firewall - One or more programs that act in concert with the gateway server to protect the computers and systems within a network.

Frame - A frame comprises all the data that is sent between network points, including the addressing and network protocol information.

FTP (File Transfer Protocol) - A protocol used to transfer and exchange files over networks that use TCP/IP. With FTP, one person can copy files into a folder within an FTP server for others to access. Permissions are generally set so that anyone seeking to access the files must enter a username and password.

FTP Server - A server that acts as the "host" for FTP transfers and exchanges. A server, such as the Wireless Space, can enable FTP access to files stored on its volume(s). The Wireless Space can act as an FTP server, allowing the user, or friends and family, to access its files or volumes by Internet hyperlinks. The base addresses are: ftp://[IP address], such as ftp://192.168.15.24; and ftp://<username>:<password>@<ip or machine name>.

#### Gateway - See Network Gateway

HTTP (Hypertext Transfer Protocol) – The most common protocol for the World Wide Web (the "www" in web addresses). HTTP is a command that aids in defining the messaging for Web servers and browsing, initiating the request to a particular address.

HTTPS (Hypertext Transfer Protocol Secure) – A secure level of HTTP that uses SSL protocol for encryption and identification. Very often seen with online financial websites or when making a purchase on the Internet.

HTTPS Certificate - A digital certificate verifies the identity of a web site or user. When a user logs onto the site, the browser will automatically accept the certificate and indicate that the site is secure (often graphically represented by a lock). HTTPS certificates may be purchased and/or generated from many online vendors.

ICMP (Internet Control Message Protocol) – Another level of address communication, along with TCP and UDP. However, this level is generally not used to send and receive messages between servers or computers. ICMP is implemented mostly for error messages, such as a Web site being unavailable, or the popular ping feature used to search for other IP addresses on a network. Inotify - Inotify is used to automatically update directory views, reload configuration files, log changes, backup, synchronize, and upload. For example, it can initiate an update of a UPnP database.

Internal Port - This port deals with requests inside the LAN, such as accessing files or sending emails.

Internet Provider - Broadband Internet service is available with a cable modem provided by the local cable provider. The cable modem is linked to the computer via an Ethernet cable.

IP Address (Internet Protocol) - Each computer must have at least one unique identity to engage in a form of network communication. The IP address has multiple layers that allow a computer to send and receive data, whether looking for web sites on the Internet from home or sending e-mail to a colleague at work.

IPv4 - The most common form of network addressing used today, IPv4 is 32-bit. The format is easily recognizable as xxx.xxx.xxx, where each "x" only represents the maximum digits in each field between periods. An IPv4 address can be 192.168.1.1 or 84.22.291.652. The maximum number of combinations reaches well over four billion. Even so, due to a world that has become dependent on Internet communication, IPv4 addressing is becoming difficult to maintain.

IPv6 - To combat the seeming inevitability of IPv4 addressing reaching its worldwide limit, IPv6 now offers much larger 128-bit addressing. Examples of the longer length are often seen as xxxx:xxx:xxx x:xx:xxx:xxx:xxx, where "x" can be a letter or a number. However, it is not necessary to use four digits in all eight fields and the address can be truncated when heavily populated with zeros. IPv6 is flexible in understanding the address even when cutting back on leading zero digits or using a double colon to remove them altogether. The address below is an example of the same network identity in all its permutations:

2001:0f34:0000:0000:0000:0000:2002:04fe

2001:f34:000:000:000:000:2002:4fe

2001:f34:00:00:00:00:2002:4fe

2001:f34:0:0:0:0:2002:4fe

2001:f34::2002:4fe

Note that the double colons can be used to replace whole fields that contain only zeros.

ISP (Internet Service Provider) - The service that has installed a cable or DSL modem in a home or business for access to the Internet.

iTunes<sup>™</sup> Server - iTunes libraries can be shared over a local network via a computer, network disk, or network device that acts as the iTunes Server. The protocol is used to detect libraries on the computer, network disk, or network device and stream playlists to anyone who requests them. The function must also be enabled on each computer that runs iTunes.

iTunes<sup>™</sup> Scan Interval - Periodic scans of the shared music libraries for updates. For example, the Wireless Space automatically performs an iTunes once every 24 hours. However, the option to manually scan is also available.

LAN (Local Area Network) - A network within a small or limited geography, such as an office, a school, or a home.

MAC Address (Media Access Control) - A unique identifier assigned by the manufacturer of a computer's network interface card. Though it has a different naming structure, a MAC address works with the IP address for network communication. There are many layers of network communication but, as an oversimplification, the MAC address supports the hardware aspect while the IP deals with the software implementation. An IP address can change while a MAC address is almost always fixed. A MAC address can generally be found in the operating system network settings, also referred to as an ethernet address, hardware address, adapter address, or physical address. The naming structure can be listed in two ways:

#### MM:MM:MM:SS:SS:SS or MM-MM-MM-SS-SS-SS

The "M" half of the address represents code used to identify the manufacturer of the network interface while the "S" half is a serial number. For example, a common manufacturer "M" prefix is, 00A0C9 since it represents Intel®. A full MAC address example is 00:23:df:99:5e:2a, with 00:23:df pointing to Apple as the manufacturer.

MAC Address Cloning - Internet service providers (ISP) may limit the amount of network connections by counting MAC addresses. Upon seeing more than an arbitrary number of MAC addresses on your home network, access will be denied to additional devices. MAC address cloning enables a router or network device (i.e. The Wireless Space) to create a single MAC address for the ISP to see while it manages the computers that are attached via Ethernet or Wi-Fi.

NAT (Network Address Translation) – A router will take addresses that come from public servers and translate them to addresses that are acceptable to the private network. This is helpful for reducing the number of IP addresses on a network or directing welcome traffic into a private network while dismissing unwanted visitors.

NAT-PMP (Network Address Translation-Port Mapping Protocol) – Taking port forwarding a step further, this allows users in a private network to automate network address translation by port number. Addresses outside the private network include a port number that mark them as acceptable. NAT-PMP converts "good" traffic into acceptable IP address within the system. Netmask - Also known as the subnetwork. A subnet address is part of the IP address information, generally placing a network geography onto one or more computers. That is, everyone with a certain subnet address is hosted or attached to a specific server. A subnet mask has an address listing similar in form to IPv4. A common subnet mask (as it is called in the operating system preferences) is: 255.255.255.0.

Network Gateway - Capable of operating in software, hardware, or a combination of the two, a network gateway assists in enabling communication between networks with different protocols. Often, the network gateway is the Internet access device (such as a broadband router) provided by the ISP. An example would be one network that is using TCP/IP, while a second runs AppleTalk and a third, UDP. The network gateway assures that the translation process between them is transparent to the user.

NFS (Network File System) - A protocol that allows a computer to access data and devices on the network. Similar to SMB/CIFS and AFP, this is a protocol that works at the application level to share files and devices over the network. NFS includes options for sharing folders and volumes on the network.

NTP Server (Network Time Protocol) - A protocol used to synchronize the time for computers that reside on the same network. Public NTP servers are also available on the Internet.

Port Forwarding - Since a port number is part of a network address, it is possible to target specific IP addresses by their port numbers. This way, remote computers or devices with IP addresses can shake hands with a particular address on a LAN. A real world example is a Playstation®3 being used for an online game. That particular game may demand a specific IP address and port number for its network communication.

Port Number - Another layer of network addressing that works with protocols such as TCP/IP or UDP/IP. A port number is represented by a number ranging from 0 to 65535. Under normal conditions, a user does not have to worry about port numbers for network communication since they remain layers in the addressing protocol. However, for advanced use, some port numbers may have to be managed or specifically opened due to the demands of hardware, software, or firewalls. For example, it may be necessary to open Port 80 in order to play a video game online. PPPoE (Point-to-Point Protocol over Ethernet) - A network protocol that connects more than one computer on a LAN to a shared access point. The access point may be a DSL (digital subscriber line), a cable modem, or a wireless connection to the Internet. PPPoE uses point-to-point protocol (PPP - common for standard dial-up phone service) together with the Ethernet protocol, thereby allowing multiple users to have access within a LAN.

Print Server - A network device that is connected to one or more printers and to client computers over a local network. It can accept print jobs from the computers and send them to the appropriate printer(s).

Proxy Server – A special server that aids in client-client, client-server, and/or server-server communications. A common example is a web server that acts as the portal for a company's traffic to the Internet. Each client has the server IP address listed as the proxy server in their network settings in order to access the Internet or use email.

QoS (Quality of Service) - How well the network or service is running. QoS reports on those factors that could effect the health of the network, such as bandwidth, packet loss, delays, etc.

Remote Access - Accessing data or managing a server or workstation from a separate system or network. The remote access feature on the Wireless Space includes the creation of a hostname (essentially, a unique web address name, such as www.wirelessspace. dyndns.org) that will enable easy management and access to data stored on the device from a separate network.

SAMBA - Another name for SMB. See SMB/CIFS

SMB/CIFS (Server Message Block/Common Internet File System) -There are many protocols that a network must implement to assure proper communication between systems, servers, and devices (such as printers). In normal operation, a computer requests a shared file or device managed by a server and the server responds to the demand. SMB/CIFS (also called "Samba") is a protocol that targets the level in which applications will ask to share a file or device. SMB/ CIFS is compatible with Linux, Mac, and Windows, meaning that all three operating systems may reside on the same shared network of servers and devices.

SMTP Server (Simple Mail Transfer Protocol) - A networking and Internet standard for email communication via IP addressing. SMTP is used for outgoing mail, often using port 25.

SOCKS (for Sockets) – A protocol that enables client-client and/or client-server communication via a proxy server. For example, two co-workers want to exchange information but one is blocked due to a firewall. Using the SOCKS Internet protocol, a proxy server will allow them to communicate.

SPI (Stateful Packet Inspection) - Used in firewall programs, SPI can monitor a network's outgoing "packets" to determine which include requests for responses. The incoming packets (emails, documents, etc.) that are valid responses are allowed through the firewall. An administrator may also set firewall traffic parameters using SPI, making certain that unwanted packets are not allowed into the network from the WAN.

SSH Server (Secure Shell) - A secure network protocol to exchange data between two devices on the same LAN. The communication occurs with a shell, such as Command Prompt (Windows) or Terminal (Mac).

SSL (Secure Socket Layer) - An encryption protocol that offers security in communication over the Internet.

SSID (Server Set Identifier) - The network name of the wireless access point. While an SSID contains no built-in security protocol, it can act as a password when kept hidden from outside traffic.

Static IP (Internet Protocol) - As opposed to DHCP, where the IP address on a computer may change based upon how the server or router manages network identities, a static IP rarely varies.

Static Port Forwarding - Configuring port forwarding to handle traffic through an IP address that does not change. A static address must be configured on a system in order to properly configure static port forwarding.

TCP/IP (Transport Control Protocol/Internet Protocol) - TCP is another layer of communication between the Internet and, within companies or organizations, the Intranet. The TCP breaks down the information that is being sent then puts it back together on the receiving end. The IP layer makes certain that the packets reach the correct address.

Time Machine <sup>™</sup> - A backup utility for computers using Mac OS X. Using incremental backups, Time Machine offers a simple interface to back up Apple computers on network or desktop attached storage devices. Users can retrieve single or numerous files that have been periodically saved. TKIP (Temporal Key Integrity Protocol) - An enhanced version of WEP security, TKIP was created to strengthen hardware that was only compatible with WEP. It adds additional security encryption to the existing WEP.

TLS (Transport Layer Security) - An encryption protocol for Internet communication that is stronger than SSL.

Torrent - Torrent is a peer-to-peer file sharing protocol used for distributing large amounts of data. The torrent protocol allows users to distribute large files without putting a high level of strain on individual computers engaged in Internet hosting. The protocol works as an alternative data distribution method so that small computers with low bandwidth can aid in large data transfers.

UDP/IP (User or Universal Datagram Protocol/Internet Protocol) -

An alternative network protocol to TCP that does not have the ability to reorder or assemble packages of data sent via the Internet. UDP generally sends the message packets and relies upon the user software to put them in order. UDP is good for cutting back on processing with smaller files, since there is little to reassemble at the destination address. IP makes certain that the correct address receives the data.

UPnP<sup>™</sup>/IGD (Universal Plug and Play/Internet Gateway Device) -

UPnP enables devices to share media and data on a network. UPnP devices are "plug-and-play" since they automatically announce their address and supported services once connected to a network. Other systems on the network that recognize those services may immediately begin sharing media with the device. UPnP is very popular with gaming systems such as the Playstation 3 or the Xbox.

WAN (Wide Area Network) - A network that covers a very large area, as compared with a LAN. In fact, WANs are often used to connect LANs. For example, an international company with offices throughout the world may have a worldwide network that allows for communication between the branches (the WAN), while each branch will have its own small network (the LANs). In the case of the Wireless Space, it is creating a LAN inside a home when used as a router. The Wireless Space LAN is connected to the Internet, which is a very large WAN.

WLAN (Wireless Land Area Network) - Similar to a LAN but within the network of a wireless access point.

WEP (Wired Equivalent Privacy) - A security protocol for WLANs. Encrypting data over radio waves, WEP is a security standard that was ported from LAN to WLAN. WEP is not the strongest level of protection for a wireless network since it does not include all layers of network addressing. WEP will protect the data and physical layers of an address.

WEP Key - The security code for a Wi-Fi access point using WEP. It is a series of hexadecimal digits (0-9 and A-F).

WEP Key ID - WEP encryption allows four keys. The user and the

wireless access point start with the base WEP Key, then add one of the four WEP Key IDs to extend the characters and strengthen security.

WOL (Wake on LAN) - Wake-on-LAN is an Ethernet networking standard that allows a device to be turned on or accessed by a network message.

WPA (Wi-Fi Protected Access) - A slightly stronger wireless security protocol than WEP.

WPA2 (Wi-Fi Protected Access 2) - Higher level of wireless security than WPA.

WPA PSK (Wi-Fi Protected Access, Pre-Shared Key) - A "key", or password, that is shared between a wireless access point (i.e. Wireless Space) and the members of the WLAN. In this case, the PSK uses WPA encryption for security.

WPS (Wireless Protected Setup) - An access point and a wireless device have physical and/or virtual WPS buttons that enable the device to join the WLAN. The WPS protocol allows a device to join a network without entering SSID or encryption codes. The buttons on the access point and the device must be pushed within a set frame of seconds or minutes.

## 6. Troubleshooting

In the event that your LaCie Wireless Space is not working correctly, please take a look at the following Troubleshooting sections and at the FAQs published on our web site – <u>www.lacie.com</u>. One of these FAQs may provide an answer to your specific question. You can also visit the downloads page, where the most recent software updates will be available:

#### www.lacie.com/support/downloads

We urge you to try troubleshooting any problem with the Wireless Space to the best of your ability. Please note that the device has a hardware reset feature in the event that troubleshooting does not resolve the issue. The hardware reset is a last resort. See 1.5. Power Button Functions for more information on resetting the Wireless Space.

If you need further assistance, please contact your LaCie reseller or LaCie Technical Support (see 7. Contacting Customer Support)

### 6.1. System Log

The system log allows you to review the type, date, time, source, and event ID of activities on the LaCie Wireless Space. Additionally, if you ever need help from LaCie technical support, the log will be important. For more information, refer to chapter 3.6.8. Dashboard: Support.

#### 6.2. Manual Updates

LaCie strives to give you the most up-to-date, comprehensive user manuals possible. It is our goal to provide you with a friendly, easyto-use format that will help you quickly install and utilize the many functions of your new device.

If your manual does not reflect the configurations of the product that you purchased, please check our web site for the most current version available.

www.lacie.com

### 6.3. Troubleshooting the USB Connection(s) and Share Files

#### 6.3.1. Mac Users

Problem	Question	Solution
The USB drive/key connected to one of the three USB ex- pansion ports is not recog- nized.	Is the USB cable securely fastened to one of the Wireless Space's front or rear USB host ports?	Make certain that each end of the USB cable is properly inserted into the USB ports of the Wireless Space and the device. Try disconnecting the cables, waiting 10 seconds, and then re- connecting them. If the drive is still not recognized, restart the Wireless Space (3.6.4. Dashboard: Shut Down or Restart the Wireless Space) and try again. If the device remains unrecognized, try another USB cable and/ or USB expansion port on the Wireless Space and/or the device.
The USB printer connected to one of the three USB expan- sion ports or the Wi-Fi access point is not recognized.	Why am I having problems accessing my USB, Wi-Fi, and/or Ethernet printer connected to the Wireless Space?	The Wireless Space does not support Printer Sharing.
The USB drives connected to the Wireless Space are not recognized by the computer.	Do your computer and network con- figurations meet the minimum system requirements?	See section 1.2. <i>Minimum Computer and Network Requirements</i> for more information.
	Is the drive's power supply connected?	Make sure that the power supply for the Wireless Space is prop- erly connected (see section 3.1. Connect the Power Supply) to a working outlet. Check your external USB storage drive to determine if it requires a power supply.
	Does the Wireless Space appear as Shared in a Mac Finder Window?	USB drives connected to the Wireless Space act similar to shares, accessible via the network. There should be an icon for the Wireless Space in the Finder Window. Clicking on the icon will reveal the shares and USB volumes. If the drive does not appear as Shared, follow the Troubleshooting tips to isolate the problem.
	If the Wireless Space appears as Shared, can you click on it and mount the USB shares? Or, can you log onto the USB drive connected to the Wireless Space via Go>Connect to Server>WirelessSpace (or, the name you have assigned to the device)?	Similar to OpenShare, USB drives connected to the Wireless Space are available to everyone on the network. You must enter the login and password for MyShare. See 3.5. Accessing and Transferring Files for more information.
	Are the volumes listed in LaCie Network Assistant?	Try to access the USB volumes in LaCie Network Assistant (3.5.2. Accessing Shares Using LaCie Network Assistant)
The USB volumes are visible but the capacity is wrong.	Why does my 4 TB hard drive appear as only 2 TB on the Dashboard Drives page?	The Wireless Space does not support volumes larger than 2 TB. You may partition the drive to create smaller volumes for use with the Wireless Space. Please consider if you are receiving optimal performance with such a large drive connected to the Wireless Space.

Problem	Question	Solution
Files cannot be copied to a USB volume connected to the Wireless Space.	Why can't I copy files to the USB volume using the Dashboard File Browser, the Dashboard Drive page, or the desktop?	Please check the file format of your volume. This is a common problem with volumes formatted in Mac HFS+ Journaled. Try to reformat the drive if the problem persists - make certain to copy all data before formatting any hard drive.
There are two drive icons for the Wireless Space in Shared, the second has the name "Wireless Space (Time Ma- chine)".	Why can't I see my Time Machine back- ups or log onto the volume Wireless Space (Time Machine)?	The icon marked "Time Machine" is a virtual representation for a Time Machine compatible disk. It is not a volume for use on the desktop. MyShare, OpenShare, and USB volumes connect- ed to the Wireless Space may be used on the desktop. You may also choose MyShare or OpenShare for Time Machine backups.
There is a delay in accessing the shares.	Are you transferring multiple files simul- taneously?	Access to a share can become slow during simultaneous file transfers.
Media files stored on the La- Cie Wireless Space are not visible on my UPnP AV media player or adapter.	Are the media files stored on Open-Share?	Confirm that the option Media Servers is turned on (see 3.6.5. Dashboard: General Settings). UPnP AV devices will only discover media files stored on Open- Share. Files stored in MyShare are not accessible to UPnP de- vices.

### 6.3.2. Windows Users

Problem	Question	Solution
The USB drive/key connected to one of the three USB ex- pansion ports is not recog- nized.	Is the USB cable connected to the Wire- less Space's rear USB host port?	Make certain that each end of the USB cable is properly inserted into the USB ports of the Wireless Space and the device. Try disconnecting the cables, waiting 10 seconds, and then re- connecting them. If the drive is still not recognized, restart the Wireless Space (3.6.4. Dashboard: Shut Down or Restart the Wireless Space) and try again. If the device remains unrecognized, try another USB cable and/ or USB expansion port on the Wireless Space and/or the device.
The USB printer connected to one of the three USB expan- sion ports or the Wi-Fi access point is not recognized.	Why am I having problems accessing my USB, Wi-Fi, and/or Ethernet printer connected to the Wireless Space?	The Wireless Space does not support Printer Sharing.
I cannot map MyShare (see section 3.5.3. Map Shared Folders) - Windows only.	Did you already map OpenShare?	Mapping OpenShare first can make it impossible to map MyShare due to the login requirement. To solve this problem, 1) Unmap OpenShare in an Explorer window; 2) map MyShare; finally, 3) map OpenShare.

Problem	Question	Solution
The USB drives connected to the Wireless Space are not recognized by the computer.	Do your computer and network con- figurations meet the minimum system requirements?	See 1.2. Minimum Computer and Network Requirements.
	Is the drive's power supply connected?	Make sure that the power supply for the Wireless Space is properly connected (see section 3.1. Connect the Power Supply) to a working outlet.
		Check your external USB storage drive to determine if it requires a power supply.
	Does the Wireless Space appear as a Network drive?	Search your Network to determine if the Wireless Space is available.
	If the Wireless Space appears in the list of Network drives, can you click on it and mount the USB shares?	Upon finding the Wireless Space, open the drive to see the vol- umes: OpenShare, MyShare, and the USB storage.
		Similar to OpenShare, USB drives connected to the Wireless Space are available to everyone on the network.
		See 3.5. Accessing and Transferring Files for more information.
	Are the volumes listed in LaCie Network Assistant?	Try to access the USB volumes in LaCie Network Assistant (3.5.2. Accessing Shares Using LaCie Network Assistant)
The USB volumes are visible but the capacity is wrong.	Why does my 4 TB hard drive appear as only 2 TB on the Dashboard Drives page	The Wireless Space does not support volumes larger than 2 TB. You may partition the drive to create smaller volumes for use with the Wireless Space. Please consider if you are receiving optimal performance with such a large drive connected to the Wireless Space.
There is a delay in accessing the shares.	Are you transferring multiple files simul- taneously?	Access to a share can become slow during simultaneous file transfers.
Media files stored on the La- Cie Wireless Space are not visible on my UPnP AV media player or adapter.	Are the media files stored on Open-Share?	Confirm that the option Media Servers is turned on (see 3.6.5. Dashboard: General Settings). UPnP AV devices will only discover media files stored on Open- Share. Files stored in MyShare are not accessible to UPnP de- vices.

## 6.4. Troubleshooting the Network Connection

Problem	Question	Solution
The system is not recognized by the computer.	Does your computer's configuration meet the minimum system require- ments?	Check section 1.2. <i>Minimum Computer and Network Require-</i> <i>ments</i> for more information.
The system is not recognized by the computer.	Is the system's power supply con- nected? Can you see the blue (Wi-Fi) or green (no Wi-Fi) light on the front of the drive?	Make sure:That the power supply is properly connected (see section 3.1. Connect the Power Supply for details)That the system has been powered on pushing the button on the back 1.5. Power Button FunctionsThat the outlet used for the Wireless Space is powered on or has a sufficient supply of power.
	Is the light on the front of the device flickering for an inordinate period of time?	If the light is flickering or will not turn on, the power supply may be defective. Please contact your LaCie reseller or LaCie Customer Support.
	Did you follow the correct installation steps?	Review the installation steps (3. Basic Installation & 4. Beyond Basic Install).
	Are both ends of the Ethernet cable firmly connected?	Disconnect the Ethernet cable from the router, switch, or In- ternet provider to the Wireless Space. Wait 10 seconds before reconnecting the cable. Ensure that the interface connectors are properly aligned. The Ethernet cable can only be inserted one way. Make sure it is correctly oriented. Check that the Ethernet connectors are straight and fully seated in the Ethernet ports. Make sure that you use the Ethernet cable provided in the LaCie Wireless Space box.

Problem	Question	Solution
The Wireless Space does not appear in LaCie Network Assistant.	Why can't I see the Wireless Space in LaCie Network Assistant?	Quit LaCie Network Assistant and restart the program.
The Wireless Space appears in LaCie Network Assistant but I cannot connect to the Dashboard.	Have your quit and restarted LaCie Net- work Assistant to confirm that the Wire- less Space is available?	If LaCie Network Assistant sees the Wireless Space but the Dash- board cannot connect, you may a problem with network settings. If you configured your network using static IP, make certain that the IP addresses for the Wireless Space are in the same range (i.e. between 192.168.1.1 and 192.168.1.250) Check your network settings to make certain that you are not using proxies to access the Internet. A proxy setting may create a conflict when trying to reach the Dashboard.
	Are you using a Router configuration?	<ul> <li>Disconnect your Wireless Space from the router, switch, or Internet provider. Make certain your computer is set to DHCP and that it is connected to the Wireless Space via one of its LAN ports. Try one of the following:</li> <li>Launch the Dashboard again and check the Firewall page. Make certain that HTTP and HTTPS are enabled. By default, they are disabled. See 4.5.5. Dashboard: Firewall. Reconnect your Wireless Space to the router, switch, or Internet provider to determine if Internet access is recovered.</li> <li>If you have set Static Port Forwarding on ports 80 or 443, turn it off. Reconnect your Wireless Space to the router, switch, or Internet provider to determine if Internet access is recovered.</li> <li>Disable UPnP IGD and NAT-PMP on the Firewall page (4.5.5. Dashboard: Firewall). Reconnect your Wireless Space to the router, switch, or Internet provider to determine if Internet access is recovered.</li> </ul>
The computer cannot access the Internet using the Wireless Space Wi-Fi access point.	Did you configure your Wireless Space as a NAS Wireless Access Point or a NAS Router - Wireless Access Point?	If the configuration is correct, confirm the following: Your operating system's Wireless Network setting lists the Wire- less Space as the current Wi-Fi network. The computer has properly registered with the Wireless Space Wi-Fi network. The Wi-Fi network name, security, and password were provided during the Setup. Verify that all information en- tered in the computer Wireless Network settings matches the Wireless Space Wi-Fi network. If the Wi-Fi network continues to fail, try connecting to the Wire- less Space via Ethernet using one of the LAN ports. Check the Wi-Fi settings to make certain that all the information matches.

Question	Solution
Are you using a Switch configuration?	Make certain that the Wireless Space is connected to the router, switch, or Internet provider via one of its three LAN ports.
	Check LaCie Network Assistant for the Wireless Space. If it is listed, try to launch the Dashboard using the hyperlink.
	Confirm that your computer is also using DHCP for its IP set- tings.
	If the connections are correct and the problem persists, try to access the Dashboard in Recovery mode (see 3.7. INTERNET Port: NAS+Switch) to troubleshoot IP addressing.
Are you using a Router configuration?	For most Router configurations, the Wireless Space is connected to the router, switch, or Internet provider via its INTERNET port. See 4.6. INTERNET Port: NAS+Router.
	Your computer should be connected to the Wireless Space via one of the LAN ports.
	Check LaCie Network Assistant for the Wireless Space. If it is listed, try to launch the Dashboard using the hyperlink.
	Confirm that your computer's IP addressing is set to DHCP to receive an address from the Wireless Space.
	If the problem persists, see section 4.1. Before the Installation to determine if there is an IP address conflict on the network. Such a conflict is possible when adding the Wireless Space to a router, switch, or Internet provider with an address of 192.168.1.1.
By default the LaCie Wireless Space is configured to retrieve its IP address from a DHCP server. If your net- work is managed by a DHCP server and you cannot access your LaCie Wireless Space, try checking your DHCP server's log. To get the IP address, run LaCie Network Assistant (3.4. LaCie Network Assistant).	
If your network is NOT managed by a DHCP server, connect directly to the Wireless Space to access the Dashboard. From the Dashboard, you may change the IP address to meet the needs of your network:	
<ul> <li>In a Router configuration, connect to one of the LAN ports to access the default IP 192.168.1.1</li> <li>In a Switch configuration, use the INTERNET port (see 3.7. INTERNET Port: NAS+Switch)</li> </ul>	
Is the IP address properly set?	For more information, please see section 3.6.6. Dashboard: Network LAN (Basic) & 4.5.3. Dashboard: Network WAN (Be- yond Basic). If you cannot reach the Dashboard, see the note above.
	Question         Are you using a Switch configuration?         Are you using a Router configuration?         Are you using a Router configuration?         By default the LaCie Wireless Space is conwork is managed by a DHCP server and y DHCP server's log. To get the IP address,         If your network is NOT managed by a DHCP server's log. To get the IP address,         If your network is NOT managed by a DHCP server's log. To get the IP address,         If your network is NOT managed by a DHCP server and y DHCP server's log. To get the IP address,         If your network is NOT managed by a DHCP server and y DHCP server's log. To get the IP address,         If your network is NOT managed by a DHCP server's log. To get the IP address,         If your network is NOT managed by a DHCP server's log. To get the IP address,         Is the IP address properly set?

Problem	Question	Solution
Port Forwarding no longer works (Router configuration only).	Why did Port Forwarding stop working?	Check the Dashboard Firewall page to confirm that the Port For- warding rule is still valid. If not, you can reenter the information. If you have added a new rule, make certain that it does not conflict with previous Port Forwarding rules. Try disabling UPnP IGD and NAT-PMP. Define a DHCP static lease rule for your target device in the Dashboard Network LAN page>DHCP static lease.

# 6.5. Light Indications

Problem	Question	Solution
The front light is red.	Can you turn the Wireless Space off?	Try restarting the Wireless Space to see if it will boot normally. See 1.8. Light Behavior for information on the light. If the light remains red, contact Customer Sup- port or your LaCie dealer.
The light keeps on flashing blue and green.	Did someone touch the WPS button by accident?	The light should stop flashing within two min- utes.
The light will not turn on at all.	Did you turn off the light in the Dashboard?	Check the Dashboard Support>Advanced features page to make certain the light check box has not been deselected.

# 7. Contacting Customer Support

Before You Contact Technical Support

- 1. Read the manuals and review section 6. Troubleshooting.
- 2. Try to isolate the problem. If possible, make the drive the only external device on the CPU, and make sure that all of the cables are correctly and firmly attached.

If you have asked yourself all of the pertinent questions in the troubleshooting checklist, and you still can't get your LaCie drive to work properly, contact us at <u>www.lacie.com</u>. Before contacting us, make sure that you are in front of your computer and that you have the following information on hand:

Information	Location	
<ol> <li>LaCie hard drive serial number</li> </ol>	Located on a sticker next to one of the product feet.	
2. Macintosh/PC model	Mac users: Click on the	
3. Operating system version	and select About This Mac.	
4. Processor speed	Windows users: Right click	
5. Computer memory	My Computer and select Properties > General.	
6. The brands and models of other internal and external peripherals in- stalled on your computer	Mac users: Click on the Apple icon in the finder bar and select About This Mac. Select More Info The Ap- ple System Profiler will launch and will list your internal and external peripherals.	
	Windows users: Right click My Computer/Computer and select Properties > Hard- ware.	

## 7.1. LaCie Technical Support Contacts

LaCie Asia	LaCie Australia
<u>http://www.lacie.com/cn/contact/</u>	http://www.lacie.com/au/contact/
LaCie Belgium <u>http://www.lacie.com/be/contact/ (</u> Dutch) <u>http://www.lacie.com/befr/contact/</u> (French)	LaCie Brazil http://www.lacie.com/us/contact
LaCie Canada <u>http://www.lacie.com/ca/contact/</u> (English) <u>http://www.lacie.com/cafr/contact/</u> (French)	LaCie Denmark http://www.lacie.com/dk/contact
LaCie Finland	LaCie France
http://www.lacie.com/fi/contact/	http://www.lacie.com/fr/contact/
LaCie Germany	LaCie Ireland
http://www.lacie.com/de/contact/	http://www.lacie.com/ie/contact/
LaCie Italy	Japan - Elecom CO., LTD
<u>http://www.lacie.com/it/contact/</u>	<u>http://www.lacie.jp/</u>
LaCie Korea	LaCie Latin America
<u>http://www.lacie.com/kr/contact</u>	http://www.lacie.com/la/contact/
LaCie Netherlands	LaCie Norway
<u>http://www.lacie.com/nl/contact/</u>	http://www.lacie.com/no/contact/
LaCie Portugal	LaCie Singapore
<u>http://www.lacie.com/pt/contact/</u>	http://www.lacie.com/asia/contact/
LaCie Southeast Asia	LaCie Spain
http://www.lacie.com/sea/contact	http://www.lacie.com/es/contact/
LaCie Sweden <u>http://www.lacie.com/se/contact</u>	LaCie Switzerland http://www.lacie.com/ch/contact (German) http://www.lacie.com/chfr/contact/ (French) http://www.lacie.com/chit/contact/ (Italian)
LaCie UK http://www.lacie.com/uk/contact	LaCie USA <u>http://www.lacie.com/us/contact/ (</u> English) <u>http://www.lacie.com/uses/contact/ (</u> Spanish)
LaCie Grand Export http://www.lacie.com/intl/contact/	

# 8. Warranty Information

This Limited Warranty applies only to hardware products manufactured by or for LaCie that can be identified by the "LaCie" trademark, trade name, or logo affixed to them. The Limited Warranty does not apply to any non-LaCie hardware products or any software, even if packaged or sold with LaCie hardware. Manufacturers, suppliers, or publishers, other than LaCie, may provide their own warranties to the end user purchaser, but LaCie, in so far as permitted by law, provides their products "as is". Software distributed by LaCie with or without the LaCie brand name (including, but not limited to system software) is not covered under this Limited Warranty. Refer to the licensing agreement accompanying the software for details of your rights with respect to its use.

LaCie does not warrant that the operation of the product will be uninterrupted or error-free. LaCie is not responsible for damage arising from failure to follow instructions relating to the product's use. This warranty does not apply:

- to consumable parts, unless damage has occurred due to a defect in materials or workmanship;
- to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports;
- to damage caused by use with non-LaCie products;
- to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes;
- to damage caused by operating the product outside the permitted or intended uses described by LaCie;
- to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of LaCie or a LaCie Authorized Service Provider;
- to a product or part that has been modified to alter functionality or capability without the written permission of LaCie; or
- if any LaCie serial number on the product has been removed or defaced.

To obtain warranty service, call LaCie Technical Support. You will be asked to provide your LaCie product's serial number, and you may be asked to furnish proof of purchase to confirm that the drive is still under warranty.

All drives returned to LaCie must be securely packaged in their original box and shipped with postage prepaid.

**IMPORTANT INFO:** Register online for free technical support: <u>www.</u> <u>lacie.com/register</u>