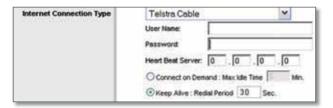**Telstra Cable**

Telstra Cable is a service that applies to connections in Australia only.

Internet Connection Type > Telstra Cable

User Name and Password Enter the User Name and Password provided by your ISP.
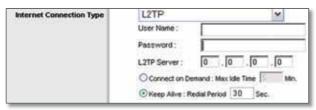
Heart Beat Server This is the IP address of the Heartbeat Server. Your ISP will provide you with the IP Address you need to specify here.

Connect on Demand: Max Idle Time You can configure the Router to cut the Internet connection after it has been inactive for a specified period of time (Max Idle Time). If your Internet connection has been terminated due to inactivity, Connect on Demand enables the Router to automatically re-establish your connection as soon as you attempt to access the Internet again. To use this option, select **Connect on Demand**. In the *Max Idle Time* field, enter the number of minutes you want to have elapsed before your Internet connection terminates. The default Max Idle Time is **5** minutes

Keep Alive: Redial Period If you select this option, the Router will periodically check your Internet connection. If you are disconnected, then the Router will automatically re-establish your connection. To use this option, select **Keep Alive**. In the *Redial Period* field, you specify how often you want the Router to check the Internet connection. The default Redial Period is **30** seconds.

L2TP

L2TP is a service that applies to connections in Israel only.

Internet Connection Type > L2TP

User Name and Password Enter the User Name and Password provided by your ISP.

L2TP Server This is the IP address of the L2TP Server. Your ISP will provide you with the IP Address you need to specify here.

Connect on Demand: Max Idle Time You can configure the Router to cut the Internet connection after it has been inactive for a specified period of time (Max Idle Time). If your Internet connection has been terminated due to inactivity, Connect on Demand enables the Router to automatically re-establish your connection as soon as you attempt to access the Internet again. To use this option, select **Connect on Demand**. In the *Max Idle Time* field, enter the number of minutes you want to have elapsed before your Internet connection terminates. The default Max Idle Time is **5** minutes

Keep Alive: Redial Period If you select this option, the Router will periodically check your Internet connection. If you are disconnected, then the Router will automatically re-establish your connection. To use this option, select **Keep Alive**. In the *Redial Period* field, you specify how often you want the Router to check the Internet connection. The default Redial Period is **30** seconds.

Optional Settings

Some of these settings may be required by your ISP. Verify with your ISP before making any changes.

Optional Settings

Router Name In this field, you can enter a name of up to 39 characters to represent the Router.

Host Name/Domain Name These fields allow you to supply a host and domain name for the Router. Some ISPs, usually cable ISPs, require these names as identification. You may have to check with your ISP to see if your broadband Internet service has been configured with a host and domain name. In most cases, leaving these fields blank will work.

MTU MTU is the Maximum Transmission Unit. It specifies the largest packet size permitted for Internet transmission. Select Manual if you want to manually enter the largest packet size that is transmitted. To have the Router select the best MTU for your Internet connection, keep the default setting, **Auto**.

Size When Manual is selected in the *MTU* field, this option is enabled. Leave this value in the 1200 to 1500 range. The default Size depends on the Internet Connection Type:

- DHCP, Static IP, or Telstra: **1500**
- PPPoE: **1492**
- PPTP or L2TP: **1460**

Network Setup

The Network Setup section changes the settings on the network connected to the Router's Ethernet ports. Wireless Setup is performed through the Wireless tab.

Router IP

This presents both the Router's IP Address and Subnet Mask as seen by your network.

Router IP Address

Network Address Server Settings (DHCP)

The settings allow you to configure the Router's Dynamic Host Configuration Protocol (DHCP) server function. The Router can be used as a DHCP server for your network. A DHCP server automatically assigns an IP address to each computer on your network. If you choose to enable the Router's DHCP server option, make sure there is no other DHCP server on your network.

Network Address Server Settings (DHCP)

DHCP Server DHCP is enabled by factory default. If you already have a DHCP server on your network, or you don't want a DHCP server, then select **Disable** (no other DHCP features will be available).

Starting IP Address Enter a value for the DHCP server to start with when issuing IP addresses. Because the Router's default IP address is 192.168.1.1, the Starting IP Address must be 192.168.1.2 or greater, but smaller than 192.168.1.253. The default Starting IP Address is **192.168.1.100**.

Maximum Number of DHCP Users Enter the maximum number of PCs that you want the DHCP server to assign IP addresses to. This number cannot be greater than 253. The default is **50**.

Client Lease Time The Client Lease Time is the amount of time a network user will be allowed connection to the Router with their current dynamic IP address. Enter the amount of time, in minutes, that the user will be "leased" this dynamic IP address. After the time is up, the user will be automatically assigned a new dynamic IP address. The default is **0** minutes, which means one day.

Static DNS (1-3) The Domain Name System (DNS) is how the Internet translates domain or website names into Internet addresses or URLs. Your ISP will provide you with at least one DNS Server IP Address. If you wish to use another, enter that IP Address in one of these fields. You can enter up to three DNS Server IP Addresses here. The Router will use these for quicker access to functioning DNS servers.

WINS The Windows Internet Naming Service (WINS) manages each PC's interaction with the Internet. If you use a WINS server, enter that server's IP Address here. Otherwise, leave this blank.

Time Setting

Select the time zone in which your network functions from this drop-down menu. (You can even automatically adjust for daylight saving time.)

Time Setting

Click the **Save Settings** button to apply your changes, or click the **Cancel Changes** button to cancel your changes.

Setup > DDNS

The Router offers a Dynamic Domain Name System (DDNS) feature. DDNS lets you assign a fixed host and domain name to a dynamic Internet IP address. It is useful when you are hosting your own website, FTP server, or other server behind the Router.

Before you can use this feature, you need to sign up for DDNS service with a DDNS service provider, www.dyndns.org or www.TZO.com. If you do not want to use this feature, keep the default setting, **Disable**.

DDNS

DDNS Service

If your DDNS service is provided by DynDNS.org, then select **DynDNS.org** from the drop-down menu. If your DDNS service is provided by TZO, then select **TZO.com**. The features available on the *DDNS* screen will vary, depending on which DDNS service provider you use.

DynDNS.org

Setup > DDNS > DynDNS

User Name Enter the User Name for your DDNS account.

Password Enter the Password for your DDNS account.

Host Name The is the DDNS URL assigned by the DDNS service.

Internet IP Address The Router's Internet IP address is displayed here. Because it is dynamic, it will change.

Status The status of the DDNS service connection is displayed here.

Click the **Save Settings** button to apply your changes, or click the **Cancel Changes** button to cancel your changes.

TZO.com

Setup > DDNS > TZO

E-mail Address, TZO Key, and Domain Name Enter the settings of the account you set up with TZO.

Internet IP Address The Router's Internet IP address is displayed here. Because it is dynamic, it will change.

Status The status of the DDNS service connection is displayed here.

Click the **Save Settings** button to apply your changes, or click the **Cancel Changes** button to cancel your changes.

Setup > MAC Address Clone

A MAC address is a 12-digit code assigned to a unique piece of hardware for identification. Some ISPs will require you to register a MAC address in order to access the Internet. If you do not wish to re-register the MAC address with your ISP, you may assign the MAC address you have currently registered with your ISP to the Router with the MAC Address Clone feature.

Setup > MAC Address Clone

MAC Address Clone

Enable/Disable To have the MAC Address cloned, select **Enable**.

User Defined Entry Enter the MAC Address registered with your ISP here.

Clone Your PC's MAC Address Clicking this button will clone the MAC address of the computer you are using.

Click the **Save Settings** button to apply your changes, or click the **Cancel Changes** button to cancel your changes.

Setup > Advanced Routing

This screen is used to set up the Router's advanced functions. Operating Mode allows you to select the type(s) of advanced functions you use. Dynamic Routing automatically adjusts how packets travel on your network. Static Routing sets up a fixed route to another network destination.

Setup > Advanced Routing (Gateway)

Setup > Advanced Routing (Router)

Advanced Routing

Operating Mode Select the mode in which this Router will function. If this Router is hosting your network's connection to the Internet, select **Gateway**. If another Router exists on your network, select **Router**. When Router is chosen, Dynamic Routing will be available as an option.

Dynamic Routing This feature enables the Router to automatically adjust to physical changes in the network's layout and exchange routing tables with the other router(s). The Router determines the network packets' route based on the fewest number of hops between the source and the destination. This feature is **Disabled** by default. From the drop-down menu, you can also select **LAN & Wireless**, which performs dynamic routing over your Ethernet and wireless networks. You can also select **WAN (Internet)**, which performs dynamic routing with data coming from the Internet. Selecting **Both** enables dynamic routing for both networks, as well as data from the Internet.

Static Routing To set up a static route between the Router and another network, select a number from the *Static Routing* drop-down list. (A static route is a pre-determined pathway that network information must travel to reach a specific host or network.) Enter the information described below to set up a new static route. (Click the **Delete This Entry** button to delete a static route.)

- **Enter Route Name** Enter a name for the Route here, using a maximum of 25 alphanumeric characters.

- **Destination LAN IP** The Destination LAN IP is the address of the remote network or host to which you want to assign a static route.

- **Subnet Mask** The Subnet Mask determines which portion of a Destination LAN IP address is the network portion, and which portion is the host portion.

- **Default Gateway** This is the IP address of the gateway device that allows for contact between the Router and the remote network or host.

- **Interface** This interface tells you whether the Destination IP Address is on the **LAN & Wireless** (Ethernet and wireless networks) or the **WAN (Internet)**.

Click the **Show Routing Table** button to view the Static Routes you have already set up.

Click the **Save Settings** button to apply your changes, or click the **Cancel Changes** button to cancel your changes.

Wireless > Basic Wireless Settings

The basic settings for wireless networking are set on this screen.

Wireless > Basic Wireless Settings

Wireless Network

Wireless Network Mode From this drop-down menu, you can select the wireless standards running on your network. If you have both 802.11g and 802.11b devices in your network, keep the default setting, **Mixed**. If you have only 802.11g devices, select **G-Only**. If you have only 802.11b devices, select **B-Only**. If you do not have any 802.11g and 802.11b devices in your network, select **Disable**. SpeedBooster works automatically with all settings, providing the added bonus of increased speed across your entire network and even greater speed when you use SpeedBooster products only.

> **NOTE:** SpeedBooster ONLY works in Infrastructure Mode.

Wireless Network Name (SSID) The SSID is the network name shared among all points in a wireless network. The SSID must be identical for all devices in the wireless network. It is case-sensitive and must not exceed 32 characters (use any of the characters on the keyboard). Make sure this setting is the same for all points in your

wireless network. For added security, you should change the default SSID (**linksys**) to a unique name.

Wireless Channel Select the appropriate channel from the list provided to correspond with your network settings. All devices in your wireless network must use the same channel in order to communicate.

Wireless SSID Broadcast When wireless clients survey the local area for wireless networks to associate with, they will detect the SSID broadcast by the Router. To broadcast the Router's SSID, keep the default setting, **Enable**. If you do not want to broadcast the Router's SSID, then select **Disable**.

SecureEasySetup If you did not utilize this network connection feature during the Setup Wizard, you may use it here by clicking the green logo. When you are prompted to start the push button setup, click **OK**.

Reset Security Use this button to reset the security settings on your network. You will need to run SecureEasySetup again on each device on your network to re-associate it with your network.

Click the **Save Settings** button to apply your changes, or click the **Cancel Changes** button to cancel your changes.

Wireless > Wireless Security

The Wireless Security settings configure the security of your wireless network. There are six wireless security mode options supported by the Router: WPA Personal, WPA Enterprise, WPA2 Personal, WPA2 Enterprise, RADIUS, and WEP. (WPA stands for Wi-Fi Protected Access, which is a security standard stronger than WEP encryption. WEP stands for Wired Equivalent Privacy, while RADIUS stands for Remote Authentication Dial-In User Service.) These six are briefly discussed here. For detailed instructions on configuring wireless security for the Router, refer to "Chapter 2: Wireless Security."

Wireless Security

Security Mode

Select the security method for your wireless network. If you do not want to use wireless security, keep the default, **Disabled**.

WPA Personal

NOTE: If you are using WPA, always remember that each device in your wireless network MUST use the same WPA method and shared key, or else the network will not function properly.

Security Mode > WPA Personal

WPA Algorithm WPA supports two encryption methods, TKIP and AES, with dynamic encryption keys. Select the type of algorithm, **TKIP** or **AES**. The default is **TKIP**.

WPA Shared Key Enter a WPA Shared Key of 8-63 characters.

Group Key Renewal Enter a Group Key Renewal period, which instructs the Router how often it should change the encryption keys. The default Group Key Renewal period is **3600** seconds.

WPA Enterprise

This option features WPA used in coordination with a RADIUS server. (This should only be used when a RADIUS server is connected to the Router.)

Security Mode > WPA Enterprise

WPA Algorithm WPA supports two encryption methods, TKIP and AES, with dynamic encryption keys. Select the type of algorithm, **TKIP** or **AES**. The default is **TKIP**.

RADIUS Server Address Enter the IP Address of the RADIUS server.

RADIUS Port Enter the port number of the RADIUS server.

Shared Key Enter the key shared between the Router and the server.

Key Renewal Timeout Enter a Key Renewal Timeout period, which instructs the Router how often it should change the encryption keys. The default Key Renewal Timeout period is **3600** seconds.

WPA2 Personal

Security Mode > WPA2 Personal

WPA Algorithm WPA2 supports two encryption methods, TKIP and AES, with dynamic encryption keys. Select the type of algorithm, **AES**, or **TKIP + AES**. The default is **AES**.

WPA Shared Key Enter a WPA Shared Key of 8-63 characters.

Group Key Renewal Enter a Group Key Renewal period, which instructs the Router how often it should change the encryption keys. The default Group Key Renewal period is **3600** seconds.

WPA2 Enterprise

This option features WPA2 used in coordination with a RADIUS server. (This should only be used when a RADIUS server is connected to the Router.)

Security Mode > WPA2 Enterprise

WPA Algorithm WPA2 supports two encryption methods, TKIP and AES, with dynamic encryption keys. Select the type of algorithm, **AES**, or **TKIP + AES**. The default is **AES**.

WPA Algorithm WPA supports two encryption methods, TKIP and AES, with dynamic encryption keys. Select the type of algorithm, **TKIP** or **AES**.

RADIUS Server Address Enter the IP Address of the RADIUS server.

RADIUS Port   Enter the port number of the RADIUS server.

Shared Key Enter the key shared between the Router and the server.

Key Renewal Timeout Enter a Key Renewal Timeout period, which instructs the Router how often it should change the encryption keys. The default Key Renewal Timeout period is **3600** seconds.

RADIUS

This option features WEP used in coordination with a RADIUS server. (This should only be used when a RADIUS server is connected to the Router.)

⚠ **IMPORTANT:** If you are using WEP encryption, always remember that each device in your wireless network MUST use the same WEP encryption method and encryption key, or else your wireless network will not function properly.

Security Mode > RADIUS

RADIUS Server Address Enter the IP Address of the RADIUS server.

RADIUS Port   Enter the port number of the RADIUS server.

Shared Key Enter the key shared between the Router and the server.

Default Transmit Key Select a Default Transmit Key (choose which Key to use). The default is **1**.

WEP Encryption Select a level of WEP encryption, **64 bits 10 hex digits** or **128 bits 26 hex digits**. The default is **64 bits 10 hex digits**.

Passphrase   Enter a Passphrase to automatically generate WEP keys. Then click the **Generate** button.

Key 1-4 If you did not enter a Passphrase, enter the WEP key(s) manually.

WEP

WEP is a basic encryption method, which is not as secure as WPA.

Security Mode > WEP

Default Transmit Key Select a Default Transmit Key (choose which Key to use). The default is **1**.

WEP Encryption Select a level of WEP encryption, **64 bits 10 hex digits** or **128 bits 26 hex digits**. The default is **64 bits 10 hex digits**.

Passphrase Enter a Passphrase to automatically generate WEP keys. Then click the **Generate** button.

Key 1-4 If you did not enter a Passphrase, enter the WEP key(s) manually.

Click the **Save Settings** button to apply your changes, or click the **Cancel Changes** button to cancel your changes.

Wireless > Wireless MAC Filter

Wireless access can be filtered by using the MAC addresses of the wireless devices transmitting within your network's radius.

Wireless > Wireless MAC Filter

Wireless MAC Filter

Wireless MAC Filter To filter wireless users by MAC Address, either permitting or blocking access, click **Enable**. If you do not wish to filter users by MAC Address, keep the default setting, **Disable**.

Prevent Clicking this button will block wireless access by MAC Address. This button is selected by default.

Permit Only Clicking this button will allow wireless access by MAC Address.

Edit MAC Address Filter List Clicking this button will open the MAC Address Filter List. On this screen, you can list users, by MAC Address, to whom you wish to provide or block access. For easy reference, click the **Wireless Client MAC List** button to display a list of network users by MAC Address.

MAC Address Filter List

Click the **Save Settings** button to apply your changes, or click the **Cancel Changes** button to cancel your changes.

Wireless > Advanced Wireless Settings

This *Wireless > Advanced Wireless Settings* screen is used to set up the Router's advanced wireless functions. These settings should only be adjusted by an expert administrator as incorrect settings can reduce wireless performance.